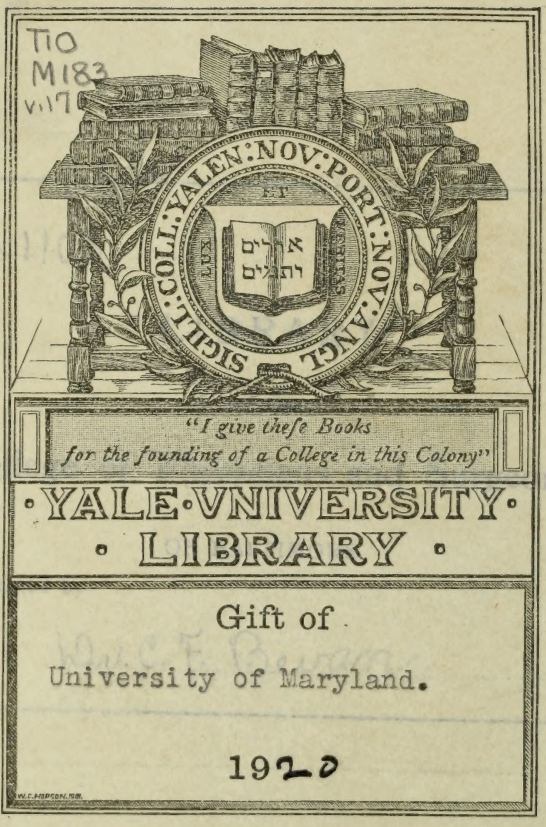
T10
M183
v.17



TRANSFERRED TO
YALE MEDICAL LIBRARY
GENERAL MEDICAL LIBRARY

Digitized by the Internet Archive
in 2014

https://archive.org/details/marylandmedicalj1718medi

MARYLAND

MEDICAL JOURNAL,

A WEEKLY JOURNAL OF

MEDICINE AND SURGERY.

VOLUME XVII.

MAY, 1887—OCTOBER, 1887.

T. A. ASHBY, M. D., Editor.
G. J. PRESTON, M. D., Associate Editor.

—PROPRIETORS—
JOURNAL PUBLISHING COMPANY,

COLLEGE OF PHYSICIANS
LIBRARY
OF
AND SURGEONS, BALTO.

BALTIMORE:
JOURNAL PUBLISHING COMPANY PRINT,
No. 209 Park Avenue,
1887

1/13 20

CONTRIBUTORS TO VOLUME XVII.

Anderson, Edward,	Rockville, Md.
Arnold, A. B.,	Baltimore.
Ashby, T. A.,	Baltimore.
Baldy, J. M.,	Philadelphia.
Bond, A. K.,	Baltimore.
Burnett, C. H.,	Philadelphia.
Caldwell, Charles,	Chicago.
Canfield, W. B.,	Baltimore.
Chapman, P.,	Perrymans, Md.
Cheatham, W.,	Louisville, Ky.
Chisolm, J. J.,	Baltimore.
Chunn, W. P.,	Baltimore.
Cohen, J. Solis-	Philadelphia.
Donaldson, Frank,	Baltimore.
Earle, C. W.,	Chicago.
Earle, S. T.,	Baltimore.
Fenger, Christian,	Chicago.
Fort, S. J.,	Ellicott City, Md.
Harrison, J. S.,	Washington, D. C.
Jackson, Edward,	Philadelphia.
Mattison, J. B.,	Brooklyn, N. Y.
McBride, Thos. B.,	Philadelphia.
Michael, J. Edwin,	Baltimore.
Morse, W. H.,	Westfield, N. J.
Preston, G. J.	Baltimore.
Reyburn, Robert,	Washington, D. C.
Riley, C. H.,	Baltimore.
Rohé, Geo. H.,	Baltimore.
Seiler Carl,	Philadelphia.
Simon, W.,	Baltimore.
Theobald, Samuel,	Baltimore.
Uhler, J. R.,	Baltimore.
Van Bibber, W. C.,	Baltimore.
Winslow, Randolph,	Baltimore.
Woods, Hiram,	Baltimore.

T10
M183
v.17

INDEX TO VOLUME XVII.

PAGE.

Albumen in the Urine of Healthy Persons..... 236
Amenorrhœa, Note on the Treatment of, With Permanganate of Potash..... 85
The American Dermatological Society.... 357
Anderson, Edward, M.D..... 351
Announcement..... 16
Antisepsis in Abdominal Operations &c.. 201
Arnold, A. B., M.D..... 401
Ashby, T. A., M.D..... 85
Assouan, Notes on Heat and "Heat-Stroke" at, in Summer of 1886..... 241
Asthma Treated by Bergeon's Method.... 63
Aveloz in the Treatment of Cancer..... 514
Bacteria, The Behavior of, in the Digestive Tract..... 193
Bacteriological Studies, Synopsis of a Series of..... 201
Baldy, J. M., M.D..... 181
Bartholow, Roberts, M.D., L.L.D..... 263
Bart, Sir Andrew Clark, M.D., F.R.S..... 162
Bladder, Two Cases of Tumors of the, Recently Removed by Suprapubic Operation..... 184
Bond, A. K., M,D..... 52
BOOKS AND PAMPHLETS RECEIVED 316, 334, 456

BOOK REVIEWS.

Atkins, Forms of Typhoid Fever, etc..... 435
Bruen, Outlines for the Management of Diet..... 195
Canfield, Cyclic Albuminuria..... 435
Field, Evacuation Medication..... 333
Fothergill, The Principles of Therapeutics..... 136
Henry, Anæmia..... 195
Horwitz, Surgery..... 14
Jackson, A Practical Treatise on the Diseases of the Scalp and Hair..... 435
Leonard, The Vest-Pocket Anatomist.... 136
Mann, System of Gynæcology..... 295
Meyer, Practical Treatise on Diseases of the Eye..... 333
Mills, The Nursing and Care of the Nervous and Insane..... 14
Morton, Refraction of the Eye..... 14
Parvin, The Science and Art of Obstetrics. 294
Potter, Hand-Book of Materia Medica etc. 14
Prentice, Ophthalmic Lenses..... 14
Schrieber, A Manual of Treatment by Massage and Methodical Exercise..... 334
Sutton, Ligaments, Their Nature and Morphology..... 334
Wythe, The Physician's Dose and Symptom Book..... 136
Burnett, C. H., M.D..... 46

PAGE.

Canfield, W. B., A.M., M.D.....461, 486, 501
Carter, Alfred H., M.D..... 223
Cattle-Horn Laceration of the Abdomen and Uterus in Pregnant Women..... 214
Chancroid, The Comparative Frequency of the..... 213
Chapman, P., M.D..... 305
Chiara's Clinic, Observations in and the Hospital St. Maria Nouva, Florence Italy..... 346
Chloroform, Review of Some Recent Literature on..... 21, 41
Cholera Infantum, The Nature and Treatment of..... 155
Cheatham, W., M.D..... 9
Chisolm, J. J., M.D..... 35, 141
Chronic Rhinitis as an Etiological Factor of Acne of the Face..... 503
Chunn, W. P., M.D..... 44, 161
Cocaine, The New Rival of..... 454
Cohen, J. Solis, M.D..... 63
Cottle Wynham, M.A., M.D..... 264
Crocker, H. Radcliffe, M.D.,F.R.C.P..... 243
Cystotomy, Suprapubic..... 134
Cysts Retroperitoneal, The Operative Treatment of, in Connection with Mikulicz's Method of Drainage..... 61
Donaldson, Frank, M.D..... 81, 102
Earle, C. W., M.D..... 441
Earle, S. T., M.D.....302, 322, 346, 361, 405
Ear-Trumpets..... 46
Eczema, A New Treatment for Obstinately Recurring..... 243
Electricity in the Treatment of Fibroid Tumors of the Uterus..... 292
Etiology and Differential Diagnosis of Typhoid and Typho-Malarial Fever... 305
Fenger, Christian, M.D..... 61, 201, 222
Forceps, Legal Responsibility for the Unskilful Use of the..... 355
Fort, S. J., M.D..... 365
Fraser, Thomas R., M.D., F.R.S..... 284
Garnett, A. S., A.M., M.D..... 286
Gleditschine-Stenocarpine..... 512
Goitre, Enlarged Thyroid, A Cause of Transverse Presentation..... 221
Gynæcology, The Progress of..... 438
Harrison, J. S., M.D..... 512
Hay-Fever, The Cavendish Lecture on a Speedy and Sometimes Successful Method of Treating..... 162
Hot-Water Vaginal Injections..... 473
Humphry, M.D.. F.R.S..... 307
Hunter, G. D., M.D..... 241
Hydriodic Acid, The Genesis and Application of..... 327
Index Catalogue, Volume VIII..... 415
Insanity in the Crime Class..... 97

PAGE.

Intra-Peritoneal Injuries, Treatment of.. 73
Jackson, Edward, M.D..... 1
Jhambul—A Contribution to a Study of a New Therapeutic Agent..... 507
Kidney, Manipulation of the, as a Means of Dislodging Renal Calculus..... 175
Lithotomy Position, A New Apparatus for Maintaining the..... 63
London Hospitals..... 455
The Maladies of Old People..... 307
Mattison, J. B., M.D..... 512
McBride, T. B., M.D..... 63
MEDICAL ITEMS.....20, 40, 60, 80, 100, 120, 140, 160, 180, 200, 220, 240, 260, 280, 300, 320, 340, 360, 380, 400, 420, 440, 460, 480, 500, 520.
Medical Consultation..... 395
Medical Societies, Resumption of Work in..... 414
Medical Subjects, Practical Notes on.....341, 363 381.
Medicine, An Address in..... 401
Medicine, The Position which Chemistry Occupies in Itself and in its Relation to..... 481
The Meeting of the International Medical Congress in Washington..... 378
Michael, J. Edwin, M.D..... 116
Milk Diet, The Abuses of, in Therapeutics..... 263
Mishap, Buck Taylor's..... 176
Morse, W. H., M.D..... 327, 425
Move in the Right Direction..... 293
Ninth International Medical Congress.... 356
Old People, The Maladies of..... 307
Ophthalmitis Sympathetic with Keratitis. 1
Optometer, The Ten Inch..... 141
Papoid, A Few Words Concerning..... 425
Pasteur's Method, The Report of the British Committee on..... 237
Pathology of Chronic Inflammatory Diseases of the Uterine Appendages... 15
Placenta, Expulsion of the..... 255
Placenta, Novel Method of Expressing the..... 161
Placenta Retained, Treatment of, etc..... 44
Plasmodium, The Presence of Marchiafava and Celli's, in the Blood of Patients Sick of Vaccinia and of Scarlet Fever.. 473
Plasters in the Treatment of Skin Diseases..... 264
Point Pinelos, The Climate of 121
Presbyterian Eye, Ear and Throat Charity Hospital of Baltimore City, That Year's Work at the..... 9, 35
Preston, G. J., M.D.....341, 363
Pulmonary Phthisis, Evergreen Forests as a Therapeutic Agent in..... 274
Pyo-Salpinx, The Relation of, to Puerperal Fever..... 181
Quackery, Shall We Attempt to Suppress, in Maryland?..... 496
Recent Advances in Preventive Medicine. 108
Rectum, Practical Notes on Diseases of the.....302, 322, 361, 405, 509
Recurrent Retinal Hæmorrhages, A Case of, etc..... 386
The Responsibilities of the Medical Student..... 436
Reyburn, R., M.D..... 384

PAGE.

Riley, C. H., M.D..... 88
Rheumatism, Acute, Observations on the Salicyl Treatment of..... 223
Rohé, George H., M.D.....108, 261, 281, 301, 321, 424.
Salicylic Acid, The Influence of, On Normal and Abnormal Temperature..... 275
Seiler, Carl, M.D..... 503
Simon, W., M.D., Ph.D..... 481
Skin-Diseases, Practical Notes on The Treatment of....261, 281, 301, 321, 424, 463

SOCIETY REPORTS.

American Climatological Association..... 110
American Surgical Association..... 50
Association of American Physicians..... 126
Baltimore Academy of Medicine...27, 64, 186
Baltimore Gynæcological and Obstetrical Society..... 89
Baltimore Medical Association..... 29
Chicago Gynæcological Society.....245, 427
Clinical Society of Maryland.....3, 68, 141
Clinical Society of Philadelphia.....152, 228
County Medical Society of Philadelphia.. 47, 190, 204, 448, 466, 490.
International Medical Congress, General Programme of the, etc..... 249
International Medical Congress, Ninth. 367, 388.
Obstetrical Society of Philadelphia....6, 32, 92, 131, 148, 407.
Report on Progress in Diseases of Children..... 52
Strophanthin, Notes on the Chemistry of. 284
Suppurating Dermoid Cyst..... 88
Surgery, the Art of..... 114
Surgical Subjects, Practical Notes Upon.. 324, 343, 421.
Syphilis, A Few Practical Observations upon the Treatment of the Late Neoplasms of..... 286
Syphilis of the Nervous System..... 254
Syphilis, The Hypodermic Injection of the Salts of Mercury in the Treatment of..... 495
Theobald, S., M.D..... 386
Thompson, Sir Henry, F.R.C.,S.M.B..... 184
The Therapeutics of Books..... 335
"Three Chambers," The Method of the.. 95
Tuberberculous Heredity and its Prophylactic Treatment.....81, 101
Typhoid Fever, Some Recent Observations Upon..... 55
Uhler, J. R., M.D..... 95
Urethritis, Obstinate..... 351
Urethritis, The Modern Treatment of.... 38
Urinary Analysis, Practical Notes on. 461, 486, 501.
Vagina, A New Colpoplastic Operation for Defect of the..... 222
Van Bibber, W. C., M.D..... 121
Ventral Hernia, Report of a Case of, Successfully Treated by Operation, with a Suggestion as to the Method of Operating..... 116
Vienna, Observations in..... 441
Virginia, Annual Meeting of the Medical Society of..... 511
Winslow, R., M.D.....324, 343, 421
Woods, Hiram, M.D.....21, 41

Original Articles.

SYMPATHETIC OPHTHALMITIS, WITH KERATITIS; RECOVERY, AFTER EXCISION OF THE EXCITING EYE.*

BY EDWARD JACKSON, M.D., OF PHILA.

Sympathetic ophthalmia, like smallpox, is now more rare than formerly, because we have for it a reliable prophylactic. That cases still occur is due to the fact that prophylaxis is sometimes neglected; and the continued diminution of their number depends, as with smallpox, upon keeping alive a just appreciation of the serious character of the disease, and the necessity for prophylactic measures. Though this is sufficient, there are additional reasons for recording the following case:

George M., aged thirty-nine, a carpenter, came to me for inflammation of the left eye, which had commenced two weeks earlier, the eye having before that been perfectly well. It presented a moderate conjunctivitis, the cornea was slightly hazy throughout, and there was a superficial ulcer near its lower margin and another near the upper outer border. There was a marked pericorneal zone, broadest opposite the ulcers. The iris seemed normal, the pupil was 5 mm. in diameter, circular, and immovable (he had been using atropia by the advice of Dr. P. C. Hoskins, of West Chester, with whom I continued to see the case) and subsequent trials showed that 5 mm. was the widest dilatation of his pupil that atropia or similar mydriatics would produce. The media back of the cornea were normal. The optic disk was *very decidedly* reddened, but not swollen or indistinct of outline; the fundus otherwise normal. The patient and Dr. Hoskins agreed that the eye looked decidedly better than it had a few days before.

The right eye presented an adherent leucoma near the outer margin of the cornea, which was otherwise clear. The pupil was distorted and closed by a dense white membrane, which toward the inner side, fell back a little from the margin of the iris, indicating that the lens was absent from its normal position. The tension of the globe was below normal. Good central light perception, but with the field narrow in all directions, especially upward. The history of this eye was that, six years before, it had been struck by a fragment of steel flying from the edge of a cold chisel. This was followed by severe inflammation, which subsided in a few weeks, and *the eye has never been at all sore since.* It was now free from undue tenderness or other symptom of inflammation. The treatment ordered was applications of a 1 to 120 solution of silver nitrate to the palpebral conjunctiva, and continuance of the atropia, with dark glasses.

Two days later the eye became decidedly worse. He was confined to a dark room, atropia solution 1 to 60 was instilled every two hours, a saline cathartic was given, and he was put on the use of mercuric chloride and potassium iodide. I saw him at the end of a week. There was now general hyperæmia of the eyeball. The mass of the cornea was clearer, but there was slight keratitis punctata and distinct vitreous opacities; vision, $\frac{12}{CC}$; great pain and photophobia. I enucleated the right eye, finding it free from evidences of recent inflammation, but presenting in the ciliary region, below, a mass of lymph the size of a split pea, in which was embedded a splinter of steel 3 mm. long, and weighing between two and three grains. The socket healed normally. At the close of the operation, and still five hours later, the left eye was decidedly paler than before the right was excised. The only change in treatment was the application of a blister to the temple, and the use of a drop of a four per cent. solution of cocaine with each instillation of the atropia solution. Next day the eye was worse but after that it improved.

One week after the excision the general hyperæmia and the photophobia had greatly decreased, but the lower

*Read before the Philadelphia County Medical Society, April 27, 1887.

corneal ulcer was much deeper, with a gray base. The application of cocaine and the internal use of mercuric chloride and potassium iodide was discontinued. At the end of the second week the eye had improved in every way. Then it grew worse. The hyperæmia and photophobia increased greatly, and very severe pain recurred every afternoon. Leeches applied to the upper lid gave no relief. When I saw him again, on the twenty-first day, the corneal ulcer was deeper than ever with an infiltrated base, the pupil was contracted, and the surface of the iris exhibited plastic exudation, vision reduced to counting fingers at twelve feet, and his appetite impaired and circulation feeble. He was placed on small doses of mercuric chloride, with tincture of chloride of iron and quinine; and locally the instillations of atropia were again increased in frequency to once every two hours, hot stupes were applied twice daily, and the conjunctiva was washed out every hour with a solution of mercuric chloride 1 to 5000. Improvement was immediate, and from this time steadily progressive. Two weeks later the corneal ulcer was nearly filled with cicatricial tissue, the remainder of the cornea clear, iris normal, pupil dilated and circular; the vitreous almost clear, and fundus apparently normal. At the end of six weeks, vision with the correcting glass was $\frac{20}{XXV}$ partly. At eight weeks after enucleation, vision $= \frac{20}{XX}$ full, with + 0.75 spherical lens; and, except the corneal opacity, and a couple of specks on the anterior lens capsule, the eye seemed normal in every respect. Five months later it continued so; and recently, thirteen months after the enucleation, I was told he was working at his trade, and that his eye continued well.

In discussing this case, the first question that arises is, was this opthalmitis due to the injury of the other eye, which for six years had given no evidence of active disease? Arlt says: "In order to establish the sympathetic nature of an affection, there should be a continuous, or at least a temporary, increase in the inflammatory or irritative condition of the uveal tract of the eye first attacked." Again, "According to all experience, it never happens that foreign bodies, after having been long encysted, or an exudation long since ossified, cause a sympathetic affection of the other eye without symptoms of inflammation or irritation in the eye first attacked."

And recently, M. Dianoux, in opening a discussion of the subject before the Société Francaise d'Ophthalmologie, makes a similar rejection of cases like this by his definition of the disease. But this is simply begging the question. In this case there were neither history, symptoms, nor collateral evidence to indicate syphilis or rheumatism. It presented hyperæmia of the disk, serous iritis, keratitis punctata, vitreous opacities, plastic iritis, and repeated relapses. What other symptom save the one under discussion could have helped to make the diagnosis more certain? Nor is this case entirely exceptional. Among the 211 cases collated in the report on sympathetic ophthalmitis made by its committee to the Ophthalmological Society of the United Kingdom, in March of last year, 23 cases of this kind are included. Ten of these may be disregarded because the supposed sympathetic disease assumed an unusual form, or ran an unusual course; but the remainder are not open to this kind of criticism. In one the interval was eighteen years, in another fourteen, in another ten, and in another eight. In all of these, however, the patient does not seem to have come under observation until many months after the onset of the sympathetic disease, except the last, which was seen some five or six weeks from its beginning. A case, however, coming on four or five years after the cessation of symptoms in the injured eye, was seen by Nettleship, both at the time of the original injury, and within five days of the first indication of sympathetic disease. The other cases mostly occurred within two years of the subsidence of inflammatory symptoms. Not only did this committee find that cases of this kind occur, but they also say: "Though the series is small, we may safely conclude from it that sympathetic opthalmitis occurring after a long interval, and without any fresh inflammation of the exciter,

is by no means likely to be mild."

It may well be questioned if the corneal ulcer and conjuctivitis had any necessary connection with the sympathetic disease. Yet I find that in three cases which form the basis of the report mentioned, corneal ulcer was noted, and, in one, conjunctivitis. And at the meeting of the American Ophthalmological Society, in 1880, Dr. D. Webster reported as sympathetic a case of catarrhal conjunctivitis which had occurred in the service of Dr. C. R. Agnew, and stated that Dr. H. D. Noyes had "presented a case of sympathetic conjunctivitis to the New York Ophthalmological Society."

The above points bear upon the diagnosis of sympathetic ophthalmitis. Of equal importance are certain questions of treatment. Atropia, I think, saved this eye from the baneful effects of posterior synechiæ. The use of tonics was symptomatic. Mercury was given interally on the strength of tradition; but it may be noted that improvement occurred under its use; and that the relapse, running into plastic iritis, happened some days after its administration had been suspended. Its local use caused no notable irritation, and was followed by rapid healing of the corneal ulcer. But the most important point in regard to treatment is the question of removal of the exciting eye. Here removal was followed by recovery. In other cases recovery has occurred without removal. Or, again, as in a case reported here some years ago, by Dr. A. D. Hall, removal has been followed by very great permanent damage or complete loss. Referring again to the report above quoted, we find that of its cases the exciter was removed early in 64, of which 8 were lost; and it was removed very late or not at all in 65, of which 26 were lost. From their investigations that committee draws the very moderate conclusion, "that whether early removal of the exciting eye be positively useful in staying the disease or no, it is certainly not injurious, as no less an authority than Mauthner has asserted that it is when the sympathetic disease is of the 'serous' form."

Society Reports.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING, HELD APRIL 1ST, 1887.

The 191st meeting was called to order by the Vice-President SAMUEL T. EARLE, M.D., in the chair.

Dr. F. Donaldson, Jr., read a paper entitled

NOTES FROM FURTHER EXPERIMENTS ON THE RECURRENT LARYNGEAL NERVE.

DISCUSSION.

Dr. G. H. Rhoé asked if ether was used in the experiments.

Dr. Danaldson, Jr., replied no. Morphia was the agent employed.

Dr. H. Rolando asked what theory, if any, was brought forward to explain the action of the strong and weak current on adduction and abduction.

Dr. Donaldson, Jr., replied that experiments were being conducted, but that no definite conclusions had yet been sent forth. In reply to Dr. Rolando's question as to the relative strength of the adductor and the abductor muscles, he said that evidence seemed to be in favor of the adductors being the stronger ones.

Dr. Clinton McSherry thought that Dr. Donaldson deserved great credit for his work on this subject, and he felt greatly obliged to him for it. He thought, though, the doctor laid too much stress on Hooper's statement regarding consciousness. He knew from a clinical standpoint, only, that when in a state of unconsciousness, the abductors are in abeyance. He then enumerated the nervous supply of the larynx and quoted Claude Bernard and others to show that if the spinal accessory nerve be torn from the medulla oblongata that adduction is lost and all of the motor branches are injured. They all have to be affected to effect respiration. Therefore, when there is much anæsthesia great stimulus is required, Less anæsthesia, less stimulus.

Dr. J. H. Branham said that Gray made the statement that the superior laryngeal nerve aided in the action of the larynx.

Dr. Donaldson, Jr., replied that when operating he always divides the cricothyroid muscle and fails to get the slight action of the cords that he used to before he practiced it.

Dr. Wm. Pawson Chunn read the next paper, entitled

A CASE OF CANCER OF THE VAGINA.

DISCUSSION.

Dr. G. H. Rhoé said that as he was responsible for the statistics of Dr. Morris, quoted by Dr. Chunn, he wanted to say that since they were compiled he had found that there were 12 other cases on record, including Dr. Chunn's case, making 52 cases in all. He had seen one case in a girl about 25 years of age. The vaginal wall was infiltrated and it caused great pain. The mass was scraped out. It recurred in a short time and the patient died from the recurrence. Microscopical examination showed it to be an epithelioma. The rarity of glands in the vagina, he thought, accounted for the rarity of cancer there. The seat of the disease is nearly always in the posterior wall. Cancer of the vulva cannot be explained in the same way, though glands are present there.

Dr. J. E. Michael thought there was a lack of fullness in statistics regarding cancer of the vulva. He cited three cases which had occurred in his experience, none of which were included in the statistics above given.

Dr. Rhoé replied that probably Dr. Michael's experience had been an unusual one. He quoted numerous authors to show that the proportion of cases seen by them was very small compared with their experience. He had seen two cases himself, one of which died, and in the other the growth recurred on the pubis.

Dr. Frank Donaldson, Sr., exhibited an apparatus for administering gaseous enemata,

for the treatment of phthisis. As such favorable reports had come from its use, he hoped that the members of the Society would test its merits. The apparatus consisted of a rubber bag filled with carbon-dioxide, this was connected by a rubber tube with a bottle containing three pints of water, in which there is placed 10 grains each of the sodium chloride and sodium sulphide. The corbon-dioxide is made to pass through this, thus producing the gaseous compound to be used. He said that reports on it so far claimed that it had decided influence on the cough and expectoration and it seemed to arrest suppuration. It does not destroy bacilli. The enema should be administered two or three times in 24 hours, and care should be taken not to give an over dose. Osler reported a case where a patient came near dying from an over dose of sulphuretted hydrogen.

DISCUSSION.

Dr. McSherry only knew of one case where it had been tried in Baltimore. His friend, Dr. H. M. Wilson, Jr., had tried it with one case and reported good results from its use.

Dr. I. E. Atkinson said that the subject seemed so attractive as to make us almost prejudiced in its favor. This is not the first cure we have had for consumption. Only a few years ago benz. of soda was claimed to cure the disease. The experiments now being done offer improvement from the fact that the patients have the stimulus of new treatment, are surrounded by good hygiene, and have the spring of the year in their favor. Up to this time the results are no better than the benz. of soda. He does not feel sanguine as to the ultimate results. It seems to prevent pus formation, and prevent pyæmic infection and for that reason ought to be used.

Dr. Clinton McSherry had once read of a celebrated sulphur factory in Germany where the proprietor said no case of phthisis had ever been there. He

asked Dr. Donaldson if he had noticed any results from aniline dyes by inhalation in phthisis.

Dr. F. Donaldson, Sr., replied that he had never used them.

Dr. J. H. Branham asked Dr. Donaldson if sulphur water had any reputation or effect in phthisis.

Dr. F. Donaldson, Sr., thought sulphur water was very apt to produce hemorrhage. He had seen cases at the White Sulphur Springs when he thought such was the case.

Dr. J. H. Branham thought that when sulphur water was taken into the stomach sulphuretted hydrogen would be taken up by the partial circulation and reach the lungs through the same channel as when introduced through the rectum. He failed to see why the same influence would not be exerted on the suppurating lung tissue.

Dr. G. J. Preston then read a paper on the

DIAGNOSIS AND PROGNOSIS OF CARDIAC MURMUR.*

DISCUSSION.

Dr. I. E. Atkinson was gratified at the paper as presented by Dr. Preston. He thought there were many points to be mentioned in that connection. Valvular disease of the heart may exist when we do not get a murmur. In extreme stenosis of the mitral valve, other symptoms may be marked and yet no murmur be heard. He related a case illustrating this point. He had also seen a man at Bay View Hospital who had pronounced symptoms of aortic regurgitation, and yet no murmur could be heard where we expect to find it. It was only heard at the apex. Then the hæmic murmurs are interesting. He related a case of a young woman who feinted and a systolic murmur became audible. It soon disappeared again. The lesion least dangerous is aortic stenosis; mitral regurgitation is apparently so, but this lesion is more common. Sudden death is most often caused by aortic regurgitation, the heart becomes over distended, the walls weaken and death results. We should always use discretion when informing our patients of the nature of their disease. The heart always makes an effort at repair by hypertrophy; this should always be considered. Patients may live for years. In life insurance people are not accepted with valvular lesions. He knows patients who were rejected years ago, now living. A large number of medical students have valvular disease of the heart. He explains the fact that they drift into the light work of a profession from being unable to perform the more arduous vocations of life.

Dr. F. Donaldson, Sr., said [the subject was a great one. He had the pleasure of seeing Sir Andrew Clark and heard his opinion on 680 cases reported by him. He confirmed the opinion that heart murmurs are often exaggerated. Patients may live 5, 10 or 20 years. Some of the most insignificant murmurs are the most serious. Loud ones are little or no prognostic symptoms. Flint showed twenty years ago that the loudest murmurs at the mitral orifice are the least dangerous. The presystolic murmur is of very grave significance; we may have it without any stenosis at all. Murmurs at the time of systole are not always mitral regurgitant or aortic stenosis. Friction of the endocardium may cause it.

Dr. R. Winslow said that an example of heart murmur came under his notice some years ago, which illustrated the fact that the intensity of the murmur bore no special relation to the severity of the valvular lesion. On November 25, 1879, he was called to see a colored man, about 30 years of age and a restaurant cook by occupation. Patient was in bed, excited and nervous, his pulse good and regular. He said he was not sick, but worried about his sins. Upon entering the room the doctor noticed a humming noise, which he supposed to be that of a sewing machine in the next house. The wife of the patient called attention to this noise, and upon auscultation the noise was ascertained to be a murmur of a peculiarly loud, rasping character,

*See MARYLAND MEDICAL JOURNAL April 23. 1887.

synchronous with impulse of the heart, which the doctor thought must be an aneurism. The man said that, as he was returning home late at night, he first heard the sound, which he interpreted to be a divine admonition. Upon visiting the man the next morning, he met the doctor at the door and said he felt all right, an examination of the chest was then made and serious disease of the aortic valves was dicovered, but no unusually loud murmur. Whatever the cause of this intra-thoracic bruit may have been, the fact remains, that it was distinctly audible at some distance from the bed upon which the patient was lying and that it had almost entirely vanished the next morning.

Dr. I. E. Atkinson had been treating a case with Dr. Fleming where the patient was suffering with great hypertrophy of the heart and was almost moribund. He gave two drops of the tinct. strophanthus every three hours and there was marked improvement.

Dr. Clinton McSherry thought that in some cases of aortic stenosis where there is great hypertrophy and the patient is a high liver, it is our duty to warn them of their danger so that they may change their habits of living.

Dr. G. J. Preston said the discussion had taken a wider range than he had intended. He only wished to invite discussion in cases where the valves themselves were simply affected. He once post-mortemed a case where the heart only weighed six ounces. There was a loud murmur during life. Three or four little excrescences were found on the valves. Thinks the murmur due to them. Many cases of stenosis are probably due to such causes and he points to the murmur as the only symptom present in such cases.

Dr. John Chambers thought that the etiology of individual cases should be considered before making a prognosis.

The Association of Medical Editors holds its next annual meeting at Chicago, on the Monday evening preceding the meeting of the American Medical Association.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD APRIL 7, 1887.

The President THOMAS M. DRYSDALE, M.D., in the chair.

Dr. Joseph Price read a paper on

ABDOMINAL SECTIONS

In reporting a mixed group of cases treated by those methods of which Mr. Tait has been the first and chief advocate, I desire to make brief reference to Dr. T. Gaillard Thomas's article on "Laparotomy as a Diagnostic Resource" published in the *Medical News*, December 11, 1886. Therein Dr. Thomas expresses in full Mr. Tait's views. They are simply without the mention of Mr. Tait's name, an embodiment of the views given vent to by Mr. Tait while on a visit in America in the Autumn of 1884. Dr. Thomas would select the text of Mr. Tait's law, his own action, as a motto for the walls of a hospital devoted to abdominal surgery. "When a doubt, as to the diagnosis of an abdominal neoplasm of serious character, or of certain obscure pathological conditions of the abdominal cavity which threaten life, exists, give the patient the benefit of explorative incision." Mr. Tait in like clean and terse English expressed the same view in a clinical lecture at the Hospital of the Jefferson Medical College, September 15th, 1884. When he said "My experience teaches me that it is a surgical crime to allow a patient to go to her grave without operation where it offers a possible relief." Dr. Thomas, with great frankness, reports five cases as examples of the class in which he had to regret non-interference on his part: Cases in which "we" or "I" decided against operation—the patient's died. Further he says: "I regret to say that I could more than double the number of cases illustrating this part of my paper. Few such cases occur to me now for the very reason that I am a strong advocate for explorative incision as a diagnostic resource." As

to another class of cases in which Dr. Thomas meets with happy results he reports as follow: "There is a class of cases in which, in my hand, explorative incision has yielded such brilliant results that I shall devote full consideration to it; I allude to cases of ascites in the female." Mr. Tait in the address, I have referred to, gave as an example in point a case operated upon four years previous. "The patient, a young lady, had an enormously enlarged abdomen, due to ascites, a fact I had recognized; I opened it by incision for exploration and drainage; by this means the fluid is evacuated just as well as with the trocar; but you cannot feel anything with a trocar; but with a clean cut of two or three inches you can introduce one or two fingers and find out the actual condition of the pelvic organs as you can in no other way." The pioneer work done by Mr. Tait, his influence in exploratory work and treatment of diseased conditions of the tubes is referred to by Mr. Greig Smith in a very fair and generous spirit. "Tait's name is mainly connected with inflammatory diseases of the tubes, and his influence has been strongly felt in the substitution of operation for actual diasease as against vague nerve symptoms." I am strongly of the opinion that an incision which admits only two fingers and not the whole hand is a sufficient incision. Dependence upon fingers skilled in manipulation will serve best and effectively guard against danger in any pelvic operation. Herein I differ from Dr. Thomas who urges: "Make an incision which will admit the whole hand; one which will admit two fingers only is hardly warrantable." There is great danger in multitude of fingers of irritating the bowels with the hand and further running great risk by exposure.

Many fatal results attend men beginning the study and practice of surgery of the abdomen. This is illustrated by the statement of an abdominal surgeon. "I do not count my first thirteen cases because I was learning how to do it." In this there was considerable Rip van Winkle arithmetic: "We won't count this one." The present good results in the hands of young surgeons must not be attributed to the taking advantage of all the so-called "latest antiseptic improvements." In this relation I will make a brief allusion to an experience with well trained young surgeons, six in number, doing nine pelvic operations due to inflammatory trouble, suppurating, adherent, and matted together pelvic viscera. The operations were all completed, with but one death, notwithstanding they were all bad cases.

In illustration I present a specimen of

PYO-SALPINX

removed by Dr. Thomas G. Morton. This patient had an enormously enlarged abdomen. She had seen a prominent gynæcologist who had plainly stated that there was no ovarian trouble and recommended tapping which was done. It is my impression that by the first tapping the large cyst was ruptured, the dropsical oc-accumulation followed. Dr. Morton found upon examination, after repeating the tapping (the patient refusing any other operation), a small tumor or collapsed cyst. He refused to repeat the tapping and urged section. He kindly asked me to see the patient. Upon examination I was fully satisfied of the correctness of Dr. Morton's diagnosis and agreed with him in urging section. It was immediately done. Extensive adhesions had developed from the tappings, free hæmorrhage followed. He removed a large collapsed cyst, and by irrigation large quantities of old clot. An interesting feature of the case was the existence of two pedicles, the pelvic and a fan shaped one over the diaphragm and stomach. The case presented very interesting and instructive features. Result: cure

PYO-SALPINX.

Ella DeLacy, white, æt. 18 years. On October 31, 1883, presented herself at the Philadelphia Dispensary complaining of free bleeding and of pain in the left groin and left sub-mammary region, intensified by locomotion. On examination the uterus was found low down and retroverted, the left ovary was tender. On June 16, 1885, vulvo-vaginal

gland enlarged and tender, abscess incised and packed. On July 1, 1885, she complained of pain in the back, left shoulder and left inguinal region. She was put on general treatment. Menstruation was normal.

November 9, 1885. Examination showed the uterus retroverted and the ovaries tender, vulvo-vaginal glands enlarged, abscess incised and packed.

November 26. The uterus had been treated for its displacement and this time was found in good position. Both ovaries were enlarged and tender. The right ovary was the largest, the left the most tender.

February 24, 1886. Uterus drawn slightly to left.

May 24. Complained of pain on coition.

January 25, 1887. Pain in right inguinal region. On examination these were found tortuous, cystic, boggymasses filling up the whole right side of the pelvis.

January 26. Dr. Price opened the abdomen in the median line, the incision being enlarged to three and a half inches on account of deep adhesions to all of the pelvic viscera. The right tube charged with pus and the right ovary with a parovarian cyst as large as a cricket-ball, were removed, the pedicle ligated with silk and dropped. Free irrigation was employed; the wound was closed with silk and drainage.

PYO-SALPINX.

reported for *Dr. J. S. Morton.*

Mrs. T., white, æt. 36, complains of pain in the right iliac region and extending down the right thigh, increased by locomotion. General condition bad. Dissipated. *Examination.* Uterus in good position; to right of cervix is a firm pedunculated tumor filling up the pelvic cavity on that side firm, nodular and adherent. *Operation.* January 25th, 1887. A two inch incision was made two inches above the pubis, two fingers were introduced and everything found practically normal except the right ovary and fallopian tube. The ovary was large as a pigeon's egg and firmly bound down in every direction and apparently more cystic than normal. The tube was likewise bound down, extremely thickened and contained fluid. After carefully examining all around the adherent mass, a point more friable than the adhesions was found and torn up. This done the enucleation became a matter of patience and application of judicious force until the whole mass had been shelled from its inflammatory bed. When thus freed, the ovary and tube were brought out of the wound and the pedicle doubly ligated as near the uterine cornu as possible and divided with scissors. Previous to dropping back the pedicle the remainder of the fallopian canal in it was thoroughly swabbed out with strong bichloride solution, 18 grains to ʒi. Scarcely any oozing took place and after thoroughly irrigating with water that had been boiled, and carefully sponging, the peritoneal cavity was found to be perfectly dry. The incision was closed without a drain. Time 55 minutes. *Progress.* Occasional slight nausea was the only untoward symptom following the operation; evening temperature 99.4°; next morning 100°. After that it did not rise until the evening of the fourth day when it mounted to 102° and she complained of considerable abdominal pain with much vomiting. This set back had come on as a result of getting up and walking about the room some hours before, during the absence of the nurse. The fifth day found her with marked symptoms of peritonitis, vomiting, and towards evening shock and evidently dying. Death occurred during the night.

Post-mortem: Parietal wound in good condition; about half a pint of cloudy serous fluid in the peritoneal cavity. Abdominal contents matted everywhere with very recent lymph; no blood or clots; kidneys somewhat granular, but not so much so as might have been expected from her dissipated manner of living; other organs practically normal.

OVARIAN CYST SIMULATING ECTOPIC GESTATION.

reported for *Dr. F. A. Packard.*

Kate Taggarounni, white, æt. 29; married the second time about two years ago. Had five children all by the first husband, no miscarriages, labors all easy and natural; made good recovery and nursed all her children. Menstruated regular in time and quantity, until Nov. 1886, when they were absent in November and December.

For the past month she had been bleeding freely, the hemorrhage appearing in clots mixed with what seemed to be shreds of decidua. The breasts tingle but are not apparently enlarged; face blotchy; no abdominal enlargement noted. She had nothing like labor pains. The discharge is of bad odor. She has had no fever or chills. *Examination* showed a cystic tumor, in the pelvis to right of uterus, about the size of gravid uterus of second month. *Operation.* On January 10th, the patient being etherized an incision three inches in length was made in the median line of the abdomen just above the pubis. Hemorrhage from the abdominal wound was slight. A small cyst of the right ovary was found consisting of two chambers one being filled with clear serous, the other with darker blood stained fluid. There were no adhesions. The cyst removed unruptured; the pedicle ligatured with silk and returned. The cyst was about the size of a small orange and sprang from the right ovary. The patient's condition after the operation was excellent. She had no rise of temperature or pulse, and no pain; four stitches were removed on the first day and the remainder on the seventh day. There has been no return of the bleeding.

Correspondence.

THAT YEARS' WORK AT BALTIMORE EYE AND EAR CHARITY HOSPITAL, BY DR. J. J. CHISOLM.

LOUISVILLE, KY., April 28, 1887.

Editor of the Maryland Med. Jour.,

DEAR SIR:—Please give this letter a place in your JOURNAL. I wish to correct some errors contained in an article, a part of which I copy below.

"In May, 1886, eight months since, a series of experiments were commenced at this hospital, having for their object the doing away with much of the restraint deemed heretofore needful for the successful treatment of cataract patients. At that time in all parts of the world there was a uniform method of treatment at the hands of all eye surgeons. Immediately after an operation every cataract patient had both eyes bandaged with heavy compresses so as to exclude all light. They were then put in dark rooms, confined to bed, lying on their backs with instructions to keep very quiet. They were restricted in their diet, and food was given to them while lying down. This treatment was usually rigidly enforced for ten days at which time the bandages were removed. The patients were then allowed to sit up, with eye shielded by dark smoked glasses, and day by day a little more light was admitted into the chamber. The revolutionary treatment which was instituted at this hospital consists in substituting a strip of the thinest isinglass plaster for the thick bandages and compresses, so that night from day could be easily detected through the diaphinous dressings. Light sufficient to permit of reading to patient was admitted into the chambers. Patients were not confined to bed, but were permitted to dress daily and eat their usual meals, in this way removing all restraint as to their diet. The pieces of retaining isinglass plaster were removed from the eye on the fifth day instead of removing the thick dressings on the tenth day as of old. So rapid was the convalescence under this new and rational mode of treatment that the patients could bear, comfortably, sunlight before two weeks had expired, and that without the wearing of smoked glasses. Here was a revolution indeed. A discovery that the very sensitiveness of the eyes injected and weeping, always found when the thick bandages were removed, and which had been a natural part of the convalescence, was due largely to the exclusion and restraining treatment in universal use, and not to the surgical operation.

The experiences at this hospital were published in a medical journal, and so important was it considered that it was copied from one to another till it went the rounds of the medical press abroad as well as at home. Now compresses, bandages, dark rooms, and restraint are giving way to simple dressings, light rooms, and non-restraining treatment. To most persons, the dungeon-like darkness of the thick bandage, kept up for at least 200 long and dreary hours, is more terrifying than the operation itself. Now with cocaine the operation for cataract is painless, and a very few days of simple treatment restores the blind to sight.

It is not surprising that this new, rational, simple treatment, starting out from our Presbyterian Hospital, should have revolutionized the after treatment of cataract patients. A leading ophthalmic surgeon of England, in a recent article in the *London Lancet*, the leading medical journal of the world writes: 'My present experience with this new method of treat-

ing cataract patients permits me to indorse Chisolm's words.' The revolution in the after treatment of cataract patients in this hospital is complete. From this time hence all bandages, compresses and dark rooms will be among things of the past to be remembered only for the discomfort they occasioned. Even from distant places comes the statement that the new method of treating cataract patients in the Presbyterian Eye, Ear and Throat Charity Hospital of Baltimore has been adopted to the exclusion of all previous methods. The good work done by our Charity Hospital is evidently not restricted to Baltimore, or even the surrounding States. It is far reaching, extending to very distant countries and to people who speak in unknown tongues their gratitude for release from one careful, and at all times very annoying treatment, now proved to have been always injurious."

You must pardon me for this long extract from a paper entitled: "Eye, Ear, and Throat Hospital of Baltimore." "A year's work, by Julius J. Chisolm, M.D., Surgeon in Charge." The report was published in your extensively circulated, JOURNAL several weeks ago, and on account of such extensive circulation, I think its inaccuracies should be equally circulated, and "Honor given to whom honor is due." I cannot imagine how such errors could have originated from as good a man as Dr. Chisolm is known to be. I would call to Dr. Chisolm's mind, when this new treatment of surgery of the eye was a revelation to him, when he spoke of Dr. Michel in the last meeting of the American Medical Association, in St. Louis in 1886, having called his attention to the fact that, the hot heavy bandage, or in his own words, "The dungeon-like darkness of the thick bandage kept up for at least 200 long and dreary hours," can be substituted by a compress of cotton and adhesive strips, and well lighted rooms for dark rooms. Dr. Chisolm, in the Ophthalmological Section of that Society, stated that Dr. Michel called his attention to these facts, which have since been "instituted at this Hospital," copied far and wide as originating in his Hospital, or rather the Hospital of which he is "Surgeon in Charge," that this new "rational, simple treatment, *starting out from our Presbyterian Hospital*," should have revolutionized the after-treatment of cataract patients. When Dr. Chisolm spoke of Dr. Michel having called his attention the new treatment, he asked if anyone present had had any experience with it. An oculist of this city stated he had been carrying it out for some years, and had gotten it from Dr. C. R. Agnew, of New York. Dr. Ray, of this city, referred to the fact also that such was Dr. Agnew's method of treatment. Mind you Dr. Chisolm was present, having opened the discussion by quoting Dr. Michel's remarks. Dr. C. R. Agnew, of New York, used isinglass strips to close eyelids after cataract extractions and iridectomies as far back as 1855, having observed their use in Bowman's, and Critchett's clinic, at the Royal London Ophthalmic Hospital. Dr. Agnew has always taught that light rooms are preferable in all surgery, on "surgical sanitary, and moral grounds."

In 1869, Dr. Agnew read a paper before the American Ophthalmological Society entitled "A Method of Dressing Eyes after Cataract Operations, etc" and it is published in the Transactions of that year. I don't think any more proof should be necessary, to show where priority is due; that this new treatment did not start in the Presbyterian Hospital of Baltimore, nor did it originate in the mind of Dr. Chisolm. It is a practice known and utilized by many since 1855. An article was read before the leading Ophthalmological Society, of this country and published in its Transactions in 1869, and Dr. Chisolm's attention was called to it in St. Louis in 1886, first by Dr. Michel, then by two or three other oculists, and yet it "started in the Presbyterian Hospital," May, 1886, immediately after the discussion in the section of Ophthalmology of the American Medical Association. It has been several years since I reported a series of cataract operations in *Knapp's Archieves*, in which I referred to having operated on twenty-four cases at the University of Louisville, six of them double extractions, after which the patients walked and rode from six blocks to six miles, and none of them lost an eye. In this article I spoke against keeping them in bed, etc. Mr. Editor

I do not write this to open up a controversy, but simply to place credit where it is due. By giving this a place in your JOURNAL you will greatly oblige,

Yours Respectfully,

W. CHEATHAM, M.D.

Abstracts and Extracts.

DISINFECTANTS AND THEIR USES.—Dr. Alfred Carpenter delivered an address at the last monthly meeting of the Association of Public Sanitary Inspectors, on "Theory and Practice as to Disinfection." He urged that sanitary inspectors, who had very great power if they used it carefully, should reason out the grounds of the application of any particular mode of disinfectant, rather than give a blind obedience to a written order.

With regard to small-pox, he pointed out that germs of living protoplasm in the breath of a patient would take root if immediately transplanted to the membrane of a susceptible person, but if floated about in the air for 100 yards they would lose their vitality. Isolation, with ventilation, as rapidly as possible, was neccesary in such cases. For disinfecting the furniture of a house after infectious disease steam was preferable, and he advised all local authorities to provide themselves with the means of steam heat. Dr. Carpenter did not recommend carbolic acid as a disinfectant in cases of disease, for it was found that the acid preserves the dormant germ from decay. This also held good of alcohol; the use of spirituous liquors as a protection against the evils of impure water was no protection at all. The same argument applied, though in a minor degree, to sulphurous acid. The best disinfectant was a solution of bichlorride of mercury. It required to be used with care, but it was rapid in its action, and so powerful that a solution of 1 part in 5,000 of water would in fifteen minutes destroy every living germ, dormant or otherwise, with which it came in contact. The best disinfectant for sewers was sulphate of iron. Dr. Carpenter concluded by saying that the lines on which disinfection should be carried out were: Ventilation, ærial disinfection by chlorine or steam, lime washing, washing floors and furniture with solutions of mercuric chloride; steam heat for clothing, furniture, etc.; and sulphate of iron or chloride of lime in adequate quantities for flushing. If these means were effectively applied infectious diseases would be completely banished from our midst, and any local authority which now allowed of their continuance was doing defective work. —*Brit. Med. Jour.*, April 9, 1887.

TREATMENT OF PHTHISIS BY SULPHURETTED HYDROGEN.—In a paper on the "Treatment of Phthisis by Sulphuretted Hydrogen," Dr. H. C. Woods presents the following statement. (*Therapeutic Gazette*, April 15th, 1887):

"Such is the evidence which I have been able to gather from the experience of others in regard to Bergeon's treatment, and it is sufficient to indicate that we are in the presence of a very important improvement of, or rather a very important addition to, medical therapeutics. It is of vital importance to decide the mode in which the treatment acts. The experiments of Dujardin-Beaumetz show that the carbonic acid is not the active agent, and that the good achieved is produced by the sulphuretted hydrogen. Reasons already assigned are sufficient to make it improbable that the good achieved is the result of any parasiticidal influence. All clinical experience indicates that heredity is in the production of consumption a vastly more important factor than is any poison introduced into the body from without. Only a portion of the medical profession believes in the active contagiousness of phthisis, whilst the experience of any life insurance company affords a firm foundation for the belief in the heredity of the disease. If the bacilli really are the exciting cause of phthisis, the susceptibility to their action must be a more important factor in the production of phthisis than are the bacilli themselves. There is at present, then, no proof that it in any way increases the direct resistive powers of the individual action of the bacilli. In some acute and chronic diseases of the

skin, local applications of sulphur act with the most astonishing rapidity and effectiveness, and the thought naturally suggest itself that in Bergeon's treatment of consumption good is achieved by the action of the sulphuretted hydrogen upon the inflamed lung-tissue, or in other words, that the plan of treatment is simply a means of making an application of sulphur to the pulmonic mucous membrane and tissue. This thought is not merely of speculative interest, but also of practical importance, for it suggests that the method of treatment will prove of value not only in consumption but in various forms of chronic or subacute affections of the lungs. This is confirmed by what experience we have. Cases of asthma and pulmonic catarrhs have already been quoted in this article as having been published in the French journals, in which the remedy has proven of the greatest service.

I saw in the Philadelphia Hospital one case of asthma with chronic catarrh and emphysema in which the administration of the rectal injections had been followed by the most pronounced relief. In another case, of catarrhal pneumonia with an enormous amount of purulent expectoration, and general symptoms so bad that a fatal prognosis had been given, the administration of the remedy was at once followed by rapid lessening and even cessation in the purulent secretion, and in a short time by convalescence.

As an important illustrative case, I cite one from my own recent experience. Mrs. L., over 70 years of age, received a severe contusion of the side in a railway accident, which was followed by pleurisy, in turn followed by bronchial pneumonia, with an enormous expectoration. She has been under my care for nearly three months, and though often temporarily benefitted by various remedies, had failed to properly respond to the most careful treatment that I could give her. The expectoration remained exceedingly profuse, amounting sometimes to a pint in the course of twenty-four hours, although very irregular. The general symptoms were very bad: sinking spells were frequent and alarming. I finally told the family that she would die, unless the gaseous injections would do something for her. Within forty-eight hours after the use of the gas, the expectoration notably decreased; the expression of the patient's face changed entirely and at present writing, fifteen days after the use of the sulphuretted hydrogen, she is exporating not one-sixth the quantity she did formerly, has regained the natural expression of her face and color of her skin, as well as her appetite, and a fair amount of strength and seems to be convalescent. A notable fact in this case is that the injections of gas relieve in a few minutes the sense of suffocation and sinking the patient formerly felt in the mornings. The secretion of urine was sensibly increased. As tested on three occasions, the subnormal temperature rose 0.4° F. within the half-hour after the exhibition of the gas either by mouth or rectum."

Electricity to Promote Lactation.—Dr. H. Pierron, a well-known gynæcologist, calls attention to the use of electricity for exciting the mammary secretion when an apparent reason exists for its failing. Without claiming invention, or even priority, he says he was first induced in 1884, upon theoretical grounds, to try it in the case of a lady patient who was anxious to nurse her own child. Although in excellent health, and everything had been done that science could suggest and wealth afford, she was unable to supply the child with enough nourishment. Dr. Pierron was successful in obtaining the desired result by means of the intermittent current of Gaëffe's induction apparatus applied to the mammary glands. The secretion thus secured was abundant and excellent in quality.

Since then the same treatment has been satisfactorily employed in all similar cases, to the exclusion of other means, when lately a difficulty of another sort occurred. A primipara had weaned her baby, but after fifteen days she noticed it was declining and pining for the breast, scarcely touching other food. In the meantime the lactary se-

cretion had ceased, and menstruation resumed its course. The electric treatment was again resorted to, and after four applications full breasts were the result, with an abundance of good milk, and for the last two months everything has been going on the satisfaction of all concerned.

The mode of operating with Gaëffe's apparatus is as follows: The negative pole, a spheroidal copper or brass cap, is to be applied under the breast. The positive pole, a round copper ball, is then first placed near the nipple, so as to touch the folding of the skin, thus stimulating the glandular orifices to begin with. The positive pole is next moved around over the whole mammary gland, working from the centre to the periphery, while the negative pole, which it is approaching, follows its motion at the base of the breast. The same operation is to be performed on each breast in succession at one sitting, but the electric current must at first be weak enough to cause no pain on an organ naturally very sensitive. A second application is made at the same sitting with a current slightly stronger, and the whole together must not last more than ten minutes. The performance is to be repeated every twenty-four hours, and four applications are usually sufficient to cause the flow of milk, when it has only been delayed. When the secretion has already been purposely suppressed, the physician should not despair if he has to renew the operation eight times. —*Paris Cor. Ther. Gaz.*

Treatment of Fibroid Tumors of the Uterus by Electrolysis.—Dr. F. H. Martin, of Chicago, concludes a paper on this subject as follows:

1. A means of generating a continuous current of electricity which can be increased per 10 to 1,000 milliampères in strength, is necessary in order to obtain all the benefits of this treatment.

2. Hæmorrhages from hæmorrhagic fibroid tumors can be cured by the local coagulating effects of the positive pole applied inter-uterine.

3. The inter-uterine electrode, when positive, should be of unattackable metal, conforming as nearly as possible to the size and shape of the uterine canal and having the vaginal portion insulated.

4. When the cervical canal cannot be entered a negative galvano-puncture should be made into the presenting part of the obstructing mass of the tumor and an artificial canal, which is to take the place of impenetrable uterine canal, in all subsequent treatments, be formed.

5. The intra-uterine electrode should in all cases be negative, unless there is hæmorrhage or excessive leucorrhœa, when the positive pole is always required. The same patient may, however, present successive symptoms demanding the use of each pole.

6. The strength of the current should be the strongest possible consistent with the desired therapeutic effect and the endurance of the patient.

7. Cases of intolerance of high doses arrange themselves under the three following heads: 1. Hysteria. 2. Enteritis. 3. Acute nephritis, peri- or parametritis; the most tolerant being the deep uterine and profusely hæmorrhagic.

8. The duration of the operation should be from eight to ten minutes, according to the toleration of the patient.

9. The number of operations is necessarily dependant upon and influenced by the result to be accomplished. A severe hæmorrhage can be checked in from four to five séances, while a general reduction of the tumor necessitates many operations, varied, of course, according to size and location. In many cases simply a restoration to health and a relief from the prominent and annoying symptoms must be accepted as a substitue for an actual cure.

10. The time of commencing the treament matters but little, if the tumor is not rapidly growing, and no excessive hæmorrhage is present. The operation should be inter-menstrual, if possible, but if hæmorrhage is continuous, operate during the flow. The séances should occur two or three times a week if compatible with the endurance of the patient, and should be as regular as possible.

11. Extra-uterine puncture should be regarded only as a last resort, but every means of reaching the tumor through the uterus being impracticable, seek, if possible to make the operation extra-peritoneal, should this in turn prove equally unadvisable, use as a final alternative the abdominal puncture.

15. Strictest cleanliness and thorough antiseptic precautions are absolutely demanded in operations connected with this treatment.

Reviews, Books and Pamphlets

The Nursing and Care of the Nervous and Insane. By Charles K. Mills, M.D. Philadelphia: J. B. Lippincott & Co. For sale by Cushings & Bailey. Price $1.00.

Dr. Mills is too well-known to require any introduction to the reading public, but we cannot refrain from recommending this book, not only to physicians, and nurses, but to any who has to deal with this class of patients treated of in this little volume before us. The author's remarks on the general management of nervous and insane are most admirable, and the important subjects of electricity and massage are clearly and practically discussed.

Quiz Compend No. 9. Surgery. By By Orville Horwitz, B.S., M.D. Third Edition. Pp. 210. Philadelphia: P. Blakiston, Son & Co. For sale by Cushings & Bailey. Price $1.00.

The volume before us has been fairly well prepared and will be acceptable to those who are looking out for "short cuts."

Ophthalmic Lenses. By Charles F. Prentice. New York: James Prentice & Son. For sale by Cushings & Bailey. Price $1.50.

This little book is a thoroughly scientific treatise on lenses and will doubtless be appreciated by oculists and opticians.

Refraction of the Eye. By A. Stamford Morton, M.B., F.R.C.S., Ed. Third Edition, pp., 67. Price $1.00. Philadelphia: P. Blakiston, Son & Co.

This little book will be of use to the general practitioner who either from choice or necessity fits glasses to his patients. The directions are clearly given and a set of test letters is inserted at the end of the book.

Handbook of Materia Medica, Pharmacy and Therapeutics. By Samuel O. L. Potter, M.A., M.D., Professor of the Theory and Practice of Medicine in the Cooper Medical College of San Francisco, etc. Pp. 828. Cloth $3.00. Philadelphia: P. Blakiston, Son & Co.

The success of the title "Quiz Compend" on materia medica has induced the author to attempt this more pretentious work, and we predict for it as pleasant a reception as had the smaller volume. The book is well arranged, following as it does the alphabetical order of the Dispensatory.

The various drugs are discussed briefly, but on the whole satisfacto rily. Then comes a section devoted to the classification of medicines, which the author has done with rather too free a hand; the lists are, most of them, too long and some of them carelessly put together. The rest of the book is devoted to therapeutics, tables of various sorts, directions for examination of urine, and for prescription writing, and, in fact, everything connected with the administration of medicine. It is unquestionably a useful book.

Piperonal.—Piperonal is the aldehyde of piperonilic acid, which is obtained from the oxydation of piperine. It crystallises in small colorless prisms. Its odor is that of vanilla; its flavor like that of menthol, but more lasting. It is insoluble in cold water, but soluble in alcohol and ether. Dr. Riccardo Frignoni first discovered its remarkable antipyretic properties. It is given in doses of 75 centigrammes every two or three hours. When given in larger doses, it causes nausea and eructations, but produces no more serious results. It is principally valued as an antiseptic.—*Brit. Med. Jour.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

T. A. ASHBY, M. D., EDITOR,

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, MAY 7, 1887.

Editorial.

THE PATHOLOGY OF CHRONIC INFLAMMATORY DISEASES OF THE UTERINE APPENDAGES.—Years ago Ruysch recognized the conditions resulting from chronic inflammatory disease of the uterine appendages, but it has only been within recent years that the frequency and serious character of these inflammatory affections have attracted much attention. Indeed, we may assert that it has only been within ten years past that this important field of clinical work has been diligently cultivated. The literature of this subject is fast assuming an extended scope, and has already become conspicuous for the clearness and accuracy with which it has presented the work of the pathologist and surgeon in this important field of investigation. The very recentness of the subject and its importance have aroused unusual zeal and earnest study, both of which facts account for the discussions which have, within the past year, been carried on among those who work in abdominal surgery. We have no way of determining the frequency of these diseases, but that they are more common than could have been imagined a few years back, the experience of Mr. Lawson Tait fully exemplifies. During the year 1886 Mr. Tait operated on 63 patients with the result of only one death. We have before us some of the deductions obtained from this work (*Brit. Med. Jour.*, April 16, 1887), which are worthy of notice. The etiology of these affections is beginning to be clearly understood. Mr. Tait lays down four lines on which the causation of the diseases, in the cases observed by him, rested: first the simply catarrhal; second, that which can be clearly traced to the influence of exanthemic disease occurring at the period of puberty; third, gonorrhœal infection; fourth, the occurrence of inflammatory mischief in the pelvis in the post-puerperal condition, either following miscarriage or full-term labor. Mr. Tait also inclines to the belief that there is a distinct group of cases in which the only explanation available of the occurrence of chronic inflammatory trouble in the uterine appendages was the existence of an infantile condition of the uterus due to arrested development.

The preponderating influence of the third and fourth causes is fully illustrated by Mr. Tait's experience. Out of 63 cases there were 10 unmarried women, and of these 10 single women there could be no doubt that in at least three of the cases the origin of inflammatory trouble was gonorrhœal. In two others of these single women there had been pregnancies. In four only could Mr. Tait draw no conclusions as to the causes of disease, though in two cases he was inclined to regard the condition as due to scarlet fever.

In the 53 women who were married, 23 had never been pregnant, although married on the average ten years. Sixteen had been pregnant only once, the pregnancy occurring immediately after marriage and being associated in every case with subsequent pelvic trouble. Only 14 cases had had more than one child and between the last pregnancy and the time of operation was an average of 6 years. These facts prove very conclusively the influence of chronic inflammatory disease of the uterine appendages in the production of sterility. In every one of Mr. Tait's cases the condition of the appendages was such that the patients could not by any possibility become pregnant. The tubes were either occluded or so adherent to the ovary or adjacent tissues as to de-

stroy their function in connection with the process of ovulation.

In the group of 23 women married for an average period of ten years without becoming pregnant Mr. Tait observed that in one third of these cases the disease arose from old gonorrhœas or gleets in their husbands, excited into activity by the indulgence of early married life. In rather more than one third of this same class he believed the disease originated in the exanthematic diseases of girlhood, more especially scarlet fever. In the second group of 15 women all of whom had been pregnant once only, pelvic peritonitis following their only labor was the cause of subsequent trouble. In the third group of 14 women whose fecundity was not limited to one child in 8 cases acute gonorrhœal salpingitis was the origin of the trouble.

ANNOUNCEMENT.—With the press of other professional duties the editor of this JOURNAL is often compelled to perform his editorial work in the most unsatisfactory manner to himself and equally so, no doubt, to many of the JOURNAL readers. To lessen his own labors and to improve the editorial work of the JOURNAL he has secured the services of Dr. G. J. Preston, of this city, who with the present issue assumes a formal position in connection with this work as Associate Editor. Dr. Preston has been a frequent contributor, during the past two years, to this and other publications. His experience, training, and literary talents eminently fit him for the duties which he will undertake in the field of medical journalism. We, therefore, take pleasure in commending him to our readers, believing, as we do, that his services will add to the better conduct of a work to which many members of the medical profession in this and other States have contributed a warm personal interest and a generous pecuniary support.

In this connection we may be permitted to remind our readers that this JOURNAL has now survived a decade and enters, with the present issue, upon its eleventh year. In reaching this period of its existence we are mindful of numerous discouragements and reverses, of the great difficulties which have been in our pathway. We are also aware, to a painful degree, of the many imperfections which have been inseparable from our work. Under all circumstances as they arose we have honestly endeavored to do our best. We have trusted largely to the generosity of our readers and we take this occasion to render thanks to all who have by word, act or deed, befriended our enterprise. What has been attempted in the past we hope will be more satisfactorily done in the future.

The right of this JOURNAL to live another decade is vested in the hands of the profession of this city and State to a very large extent. If they continue to extend to it a generous moral and material support it will undoubtedly go ahead in the work before it. During the past ten years the editor has made innumerable personal and pecuniary sacrifices that this work might survive a decade. He has reached this point and he now is willing to place the responsibility for its future in the hands of others who, no doubt, will be better qualified to conduct a work which he was instrumental in organizing and in placing upon a solid financial basis.

Miscellany.

OFFICERS, COMMITTEES, AND SECTIONS OF THE MEDICAL AND CHIRURGICAL FACULTY OF MARYLAND, FOR THE ENSUING YEAR.

Officers were elected as follows to serve for one year:

President.—Dr. I. E. Atkinson.

Vice-Presidents.—Dr. Chas. H. Jones, Dr. James Carey Thomas.

Recording Secretary.—Dr. G. Lane Taneyhill.

Assisting Secretary.—Dr. Robt. T. Wilson.

Corresponding Secretary.—Dr. Joseph T. Smith.

Reporting Secretary.—Dr. Edward E. Mackenzie.

Treasurer.—Dr. W. F. A. Kemp.

Executive Committee.—Dr. Geo. W. Miltenberger, Dr. J. Edwin Michael, Dr. Philip C. Williams, Dr. John S. Lynch, Dr. Randolph Winslow.

Examining Board of Western Shore.—Dr. S. C. Chew, Dr. T. S. Latimer, Dr. Frank Don-

aldson, Sr., Dr. T. B. Evans, Dr. Wilmer Brinton, Dr. T. A. Ashby, Dr. H. P. C. Wilson.

Examining Board of Eastern Shore.—Dr. G. T. Atkinson, Dr. B. W. Goldsborough, Dr. A. H. Bayley, Dr. James Bordley, Dr. J. K. H. Jacobs.

COMMITTEES.

Library.—Drs. B. B. Browne, I. E. Atkinson, G. Lane Taneyhill, L. H. Steiner, T. Barton Brune.

Publication.—Drs. H. M. Wilson, E. G. Waters, C. O'Donovan, Jr.

Memoirs.—Drs. John R. Quinan, John Morris, E. F. Cordell, Wm. Green, Claude Van Bibber.

Ethics.—Drs. P. C. Williams, H. M. Wilson, John Monmonier, T. S. Latimer, T. B. Evans.

Curator.—Dr. Christopher Johnston, Jr.

SECTIONS.

Surgery.—Drs. C. Johnston, Sr., R. Winslow, J. W. Chambers, H. H. Biedler, R. W. Johnson.

Practice.—Drs. I. E. Atkinson, C. H. Ohr, P. C. Williams, John Neff, D. W. Cathell.

Obstetrics, etc.—Drs. W. T. Howard, Thos. Opie, T. A. Ashby, L. E. Neale, C. H. Jones.

Materia Medica, etc.—Drs. Richard Gundry, Jos. T. Smith, E. F. Cordell, G. T. Atkinson, H. T. Rennolds.

Sanitary Science.—Drs. Geo. H. Rohé, John Morris, W. C. Van Bibber, W. S. Forwood, P. H. Reiche.

Anatomy, Pysiology, etc.—Drs. T. S. Latimer, W. T. Councilman, S. T. Earle, W. D. Booker, Herbert Harlan.

Psychology, etc.—Drs. John S. Conrad, Jas. Carey Thomas, C. G. Hill, G. Lane Taneyhill, A. H. Bayley.

Microscopy, etc.—Drs. A. G. Hoen, L. M. Eastman, T. B. Brune, W. A. B. Sellman, W. B. Canfield.

Opthalmology, etc.—Drs. Samuel Theobold, Samuel Johnson, Jacob Hartman, H. C. McSherry, Joseph F. Perkins.

Delegates to American Medical Association at Chicago, June 7, 1887.—Drs. A. B. Arnold, A. H. Bayley, B. B. Browne, Wilmer Brinton, T. Barton Brune, J. E. M. Chamberlain, J. J. Chisolm, E. F. Cordell, John Dickson, W. T. Howard, Robt. W. Johnson, John S. Lynch, T. S. Latimer, J. E. Michael, John Morris, Thos. F. Murdock, Chas. G. W. Macgill, John R. Quinan, Geo. H. Rohé, Samuel Theobald, Randolph Winslow.

Delegates to State Medical Associations.

Pennsylvania.—Drs. John Morris, J. E. Michael, John Barron.

West Va.—Drs. J. J. Chisolm, Geo. B. Reynolds, John W. Chambers, J. H. Branham, J. G. Wiltshire.

Virginia.—Drs. W. T. Howard, John S. Conrad.

North Carolina.—Drs. W. S. Maxwell, L. McLane Tiffany.

Delegates to the International Medical Congress Washington, D. C., September, 1887.—Drs. A. B. Arnold, T. A. Ashby, W. D. Booker, J. J. Chisolm, John S. Conrad, John Dickson, T. B. Evans, W. S. Forwood, W. T. Howard, C. H. Jones, W. F. A. Kemp, John S. Lynch, J. E. Michael, John N. Mackenzie, John Morris, H. T. Rennolds, R. H. Thomas, G. Lane Taneyhill, W. C. Van Bibber, P. C. Williams, W. H. Welch, Henry M. Wilson.

PROGNOSIS OF CEREBRAL SYPHILIS.—Dr. O. Braus, of Aachen, at the conclusion of a monograph on cerebral syphilis, sums up the result of his experience in the following synopsis:

1. The prognosis of syphilis of the brain is worse than in any other organ.

2. The effectiveness of the mercurial treatment of syphilis is very irregular, and depends upon the timeliness of its employments.

3. The failure of mercurial treatment of a disease of the brain is no evidence that it is not syphilitic, for it is often observed that in cases of disease of the brain along with affections of other organs markedly syphilitic (gummata exostoses, rupia, serpiginous ulcers, etc.), the latter will disappear under mercurial treatment, while the former will remain uninfluenced.

4. Syphilitic disease of the brain usually, after a certain length of time, induces other organic changes against which anti-syphilitic remedies are powerless, and which sooner or latter bring the patient to the insane asylum.

5. The author is fully convinced that the treatment of cerebral syphilis is effective only for a certain length of time after its occurrence. While we may have to treat syphilis repeatedly on the re-appearance of its manifestations, the first treatment in these cases decides the fate of the patient, and our reliance must be upon the doubtful success of the first treatment, and not a subsequent one, for here, generally, the conditions have led to organic alterations in the brain.

6. The large majority of patients with syphilis of the brain belong to the classes who sustain themselves by intellectual labor.

7. The danger in cerebral syphilis lies in the local organic changes produced in the brain.—*Amer. Practitioner.*

Prognosis in Albuminuric Retinitis.—The volume of the *Transactions* of American Ophthalmological Society, which has lately been issued, contains an important paper by Dr. Steadman Bull on Albuminuric Retinitis. It is an analysis of a hundred and three cases, most of which were under observation a considerable time, and has an important bearing upon the question of prognosis, both as regards vision and the duration of life. In thirty-two cases there was temporary improvement of vision while the patient was under treatment; this was due to the disappearance of retinal œdema, but in no instance did any absorption of the glistening stellate exudation at the macula take place. Dr. Bull confirms the unfavorable prognosis as to the duration of life which the presence of albuminuric retinitis is generally held to imply. It is, of course, nearly always impossible to fix the date at which the disease commenced, but of the hundred and three cases eighty-six died, fifty-seven within a year, and eighteen within two years after first coming under observation, cases of renal disease due to scarlet fever and vision being much more favourable.—*British Medical Journal.*

A French Version of Dr. Sayre's Orthopædic Surgery.—A very satisfactory translation of the second edition of Dr. Lewis A. Sayre's "Orthopædic Surgery and Diseases of the Joints" was made by the late Dr. Henri Thorens. We regret to learn that Dr. Thoren's death prevented him from quite completing the task, to which he devoted a great deal of care. The volume has recently been published by Steinheil, of Paris, the concluding work on translation having been done by Dr. J. Pignol, a hospital interne. An interesting and appreciative preface has been written by Dr. Polaillon, and the book makes a very creditable appearance.—*N. Y. Med. Jour.*

The Treatment of Colds.—Dr. J. H. Whelan states in the *Practitioner* for March, 1887, that he has found a combination of belladonna, quinine, and arsenic almost specific in aborting common colds if commenced in the early stage of the affection, while it is still confined to the nose and pharynx. The formula which he uses is the following:

℞.—Quiniæ sulphatis, gr. xviii;
Liquoris arsenicalis, ♏xii;
Liquoris atropinæ, ♏i;
Extracti gentianæ, gr. xx;
Pulveris gummi acaciæ, q.s. ut fiant [pilulæ xii.

Sig.—One every three, four, or six hours, according to circumstances.

Dr. Whelan states that at starting one pill should be taken every three or four hours, and later on six hours, and he believes that if a catarrhal subject has a box of these pills always at hand he will almost invariably succeed in aborting a cold.

He does not profess to explain how his remedy acts, unless it be as a powerful nervine and general tonic.—*Ther. Gaz.*

Iodol in Diphtheria.—In order to test the statements of Dr. Mazzoni, Dr. L. L. Stembo, of Vilna, tried (*Proceedings of the Vilna Medical Society*, No. v, 1887, p. 114) the local use of iodol in seven cases of diphtheria, two of which were severe. The drug was applied either alone, in powder, or in the form of a solution (℞ Iodoli, ℈ss; liq. vini, ʒss; glycerini, ʒiijs). All the patients recovered after treatment lasting from four to six days. The advantages claimed by Dr. Stembo for iodol are its complete harmlessness, its freedom from unpleasant smell or taste, the painlessness of its application, and the absence of any untoward secondary effects, such as loss of appetite, nausea, vomiting, etc.—*Brit. Med. Jour.*

A New Remedy for Itching Piles.

℞. Tinct. capsicum, 1 part;
Spts. turpentine, 2 parts;
Spts. camphor, 3 parts;
Decolorized iodine, 3 parts. M.

—*Chicago Med. Times*, February, 1887.

Biniodide of Mercury as an Antiseptic.—Dr. P. K. Bolshesolsky, of St. Petersburgh (*Vratch*, No. xi, 1887, p. 220), from numerous experiments made by himself and Professor A. P. Dobroslavin's laboratory, concludes that biniodide of mercury is a more powerful and less poisonous antiseptic than corrosive sublimate. Thus he fully confirms the observations of Bernhardy. A solution of 1 in 4,000 destroys putrefaction microbes more completely than a sublimate solution of 1 in 2,000. The biniodide dissolved in a solution of iodide of potassium was recently tried, with apparently good results, in three cases of laparotomy, under Professor A. I. Krassowski. For washing the floor, a solution of 1 in 4,000 was employed; for disinfecting the hands, 1 in 2,000; for instruments, 1 in 2,000 and 3,000.—*Brit. Med. Journal.*

The Microbe of Typhoid Fever.—At the recent meeting of the Société des Hôpitaux, M. Chantemesse made an interesting communication concerning the morphological and biological characteristics of the typhoid-microbe. The sporulation of this microbe takes place between 19° and 48° C. (67° to 104. 4° F.). It develops in water, even if sterilised. At a temperature of 15 C.—(113° F.) the cultivations live for several days; they are destroyed by boiling. This microbe retains its vitality in damp ground. Corrosive sublimate (1 in 20,000) and sulphate of quinine (1 in 800) destroy it. Carbolic acid (1 in 400) has no effect on it; hydrochloric acid is also inert, therefore the acidity of the stomach is not inimical to this microbe.—*British Medical Journal.*

Ergotine in Intermittent Fever.—Dr. S. L. Savitski, writing in the *Vrach* on the value of ergotine in the treatment of intermittent fever, remarks that the drug has been used with success in the treatment of many affections,—*e. g.*, by Vidal in prolapsus recti, by Hunt and Pepper in diabetes, by Saunder, Murrell, and Noakes in diabetes insipidus, by Allan in the cough in some lung affections, by Granzio in obstinate constipation, by Gauldmel in the night-sweats of phthisis, by Martini in spermatorrhœa, by Demange in some forms of typhoid fever, and by Girma in general paralysis. It has been also employed in chorea and in dysentery.

The theory of its action in these diseases he does not pretend to expound, but he calls attention to the similarity of the action of quinine and ergotine. Both, he says, undoubtedly cause contraction of the uterus and the spleen, the effect of quinine on the uterus having been scientifically worked out in a dissertation published by T. T. Smolski in 1876, and that of ergotine on the spleen having been shown by Dobodchiki (*Vrach*, 1880) and by Semchenko (*Vrach*, 1883). This similarity led him to think that one of these drugs might serve as a substitute for the other, and he therefore made a large number of observations on the effect of ergotine upon the cases of intermittent fever occurring in the Lubinski regiment with excellent results, especially where an enlarged and tender spleen was present. He finds that a combination of ergotine with quinine acts very satisfactorily, and that in this way considerable quantities of quinine can be saved, as half the dose of quinine which would be required if given alone will suffice if combined with ergotine. The preparation of ergotine used was Bonjean's, the dose in chronic cases being about a grain three times a day.—*Lancet*, Feb. 19, 1887.

Inequality of Pupils in Healthy Persons.—From an examination of 134 healthy recruits, Dr. G. S. Ivanoff, of Kirilov, came (*Vratch*, No. vii, 1887, p. 162) to the following conclusions: 1. Equal or symmetrical pupils, as well as equal or symmetrical halves of the face, are met with but seldom, the former only in 9 per cent. of the persons examined, and the latter only in 1.2 per cent, 2. The inequality or asymmetry is probably dependent upon an asymmetrical development of the cerebral hemisphere. 3. In 54.5 per cent. of persons, the left pupil, and in 73.9 per cent. the left side of the face is larger than the right one.—*Brit. Med. Jour.*

Medical Items.

In Italy cremation by electricity is to be tested.

There are four cases of leprosy in Minnesota, as against six in 1884.

The Arkansas State Medical Society meets at Little Rock on June 1, 2, and 3.

Dr. Moritz Schuppert,a well-known surgeon of New Orleans, La., died in that city on May 2, aged 69 years.

The mortality from labor in China is estimated to be eight per cent., or about four hundred thousand deaths annually.

President Cleveland has appointed Dr. Geo. M. Sternberg, U. S. A., to investigate the merits of inoculation for the prevention of yellow fever, as practiced in Mexico and Brazil.

The Faculty of the University of Pennsylvania have banished cigarettes from the college grounds on the recommendation of Prof. J. Wm. White, who has charge of the physical education of the students.

The annual commencement of the Medical Department of the University of Pennsylvania was held on May 2nd. The degree of M.D. was conferred on 99 graduates and of D.D.S. on 39.

The Association of Genito-Urinary Surgeons, recently organized in New York City, will hold its first annual meeting at the Laurel House, Lakewood, N. J., on May 17, and 18th. A number of papers will be read.

The Assembly of Wisconsin has passed a bill appropriating $15,000 as a contingent fund, to be used, if necessary, in the next two years by the State Board of Health in preventing the introduction of cholera into that State.

Mrs. Adam T. Bruce, of New York, has presented to the Johns Hopkins University the sum of $10,000 in cash for the establishment of a fellowship in commemoration of her son, the late Adam T. Bruce, Ph.D., recently a fellow and subsequently an instructor in the University. The gift has been accepted by the Trustees.

Dr. Herschberg, of Berlin, Dr. Von Wecker, of Paris; Dr. Mauther, of Vienna; and Dr. Landolt, of Paris, all distinguished ophthalmologist have accepted positions as vice-presidents of the section of Ophthalmology in the Ninth International Medical Congress. They promise to attend the meeting and to read papers.

The Museum of Anthropology, in Paris, contains ten almost perfect crania and fragments of sixty others, illustrating the fact that the men of the polished stone age used to trephine with considerable frequency. As nearly all the holes were in the motor areas, it seems probable that prehistoric man only trephined for traumatic epilepsy.—*Ex.*

The British Medical Association meets this year in Dublin. The president of the meeting will be Dr. John T. Banks, Regius Professor of Physics in the University of Dublin. The Rev. Samuel Haughton, who is looked upon as the embodiment of the ideal cultivated Irishman, will deliver an address on Medicine. Addresses will also be delivered by Professors Gairdner and Hamilton.

The evils of easy divorce may be counteracted either by restricting the power of courts to grant decrees, or by regulating the mode of the marriage contract, prescribing forms, requiring publicity, etc. In the *Forum* for May, Judge Edmund H. Bennett, of Boston, who strongly favors the second way of making divorce less frequent, will show how lightly the contract of marriage is treated in the legislation of the States. It is simple truth and no exaggeration whatever that in many States, notably New York, a man and woman, or a boy and girl, may be married with less form and ceremony than attends the purchase of a peck of potatoes.

Medical work is closely allied with charitable work, and physicians will be both interested and profited by a knowledge of the results of the investigations of charity organization societies obtained in Boston and New York. These show that in large cities the proportions of worthy and unworthy applicants for relief is very nearly a fixed one, and that a general law can be laid down, which is as follows: Among one hundred applicants for charity there will be found nine worthy of continuous relief; twenty-two worthy of temporary relief; fifty-four needing work more than relief; fifteen unworthy of relief; this is the result of an investigation of 16,496 cases.—*Med. Rec.*

The fifth annual commencement of the Woman's Medical College of Baltimore was held at the hall of the Y. M. C. A., in this city, on May 2nd. The degree of M.D., was conferred upon India M. Cochel, of Maryland, and Jasmine McAlpine, of Ohio. At night the Alumni Association re-union and banquet was held at the College Building. Several of the Alumni, now practicing medicine in adjoining States, were present. The Woman's Medical College has a three years' graded course, the length of the course extending from October 1st to April 15th. Both written and oral examinations are required and the successful graduate must secure an average standard of 70 out of 100. The standard of the school has been fixed so high that it has diminished the number of students at least 50 per cent. It is the purpose of the Faculty to maintain this standard in the face of these facts.

Original Articles.

REVIEW OF SOME RECENT LITERATURE ON CHLOROFORM AND ETHER.

BY HIRAM WOODS, M.D.,

Assistant Surgeon in Presbyterian Eye, Ear and Throat Charity Hospital.

To anyone who follows current medical literature it must be evident that the question of the proper selection of an anæsthetic is again coming to the front. That ether has long been and still is held by the majority of surgeons to be safer than chloroform, will, I think, pass without dispute. The grounds for this may be stated to be the belief that ether does not depress the action of the heart as suddenly and decidedly as does chloroform, that it usually gives timely warning of danger by stertorous breathing, etc., and by the conviction that statistics are decidedly in favor of ether. Some few surgeons have, however, held on to chloroform. In their hands chloroform has always been safe when given with certain precautions, it is easier of administration and more agreeable to the patient. Consequently they go on using it. The general acceptance of ether has led to its indiscriminate use under all sorts of conditions. The natural result has been that many bad effects of ether have been noted which were previously unknown. Men who have used it freely are now advancing the opinion that there are certain states which positively contra-indicate it. Some others hold that ether often kills, just as chloroform does, by producing heart paralysis, and, still again, the supposed value of statistics is reckoned for nothing because of the impossibility of getting all the facts.

At the meeting of the New York Academy of Medicine, on April 7th. Dr. Arpad G. Gerster read a paper on "The Proper Selection of an Anæsthetic" (The paper and discussion following its reading may be found in full in the *New York Medical Record* for April 23rd). Dr. Gerster opens his paper by noting that in the discussion of the merits of anæsthetics we "have seen too often the zealot's vehemence, the partisan's lack of candor and the exaggerations of a political controversy instead of the maintenance of the unbiassed and calm tenor of the scientific observer's mind." The difficulty is that one cannot always tell just where a legitimate adherence to the lessons from his own experience ends, and the "zealot's vehemence" begins. The "ether-man" points to a certain number of deaths from chloroform, and shows a smaller ratio of fatal cases when ether is used. That is all the argument he wants as to the relative safety of the two agents. The chloroform enthusiast examines the details of these deaths, finds that certain things were done which he would not allow or that other things were omitted which he considers necessary, and he blames the death on "faulty administration," not on chloroform. Many "chloroform accidents" do unquestionably present certain features which, so to speak, are palliating circumstances in favor of chloroform. Such an accident, it seems to me, is the one reported in the *Philadelphia Medical News* Vol. XLV. No. 13. Chloroform was administered to a woman sitting in a Dentist's chair and two attempts were made to extract roots while the patient was "only partially anæsthetized in order that she might aid in her voluntary efforts." After the second attempt the necessity of preparing the mouth for false teeth was gone. Here two rules, which, I believe, chloroform adherents would enforce, were violated:

(1.) The patient should have been lying down.

(2.) The operation, especially if it involved any interference with the fifth nerve, should not have been attempted during "*partial* anæsthesia." After eliminating all such cases as this, however, there are many chloroform deaths left which cannot possibly be explained away or palliated. Either the heart stopped suddenly and nothing would make it go again, or death occurred in some other way, in spite of all known means to resuscitate the patient. Such a case would prove fatal in the hands of

anyone, and the fact that one has gone a score of years without such an accident is no proof that he may escape another day; and when it does come, he too will be unable to stir up the heart when it has stopped. In view of these facts the following from the paper of Dr. Farrington, of Binghampton, New York, (published in the *N. Y. Medical Journal* of January 22nd.) sounds very much like the "zealot's vehemence:" "I regard the administration of chloroform by inhalation in competent hands, as but little more perilous than eating beefsteak. Now and then a man gets a piece of beef in his windpipe and dies of suffocation, yet people are not deterred thereby from the use of beef." When it can be shown that beef has the same constant tendency to get into the windpipe of a healthy man, that chloroform has to depress the action of a healthy heart, the metaphor may be appropriate; hardly before.

Proceeding with his subject, Dr. Gerster shows that "chloroform is the more powerful agent, and that hence its administration requires a greater amount of care, caution and circumspection." Its dangers, however, are limited to the duration of anæsthesia, and the patient is safe as soon as consciousness is restored. Ether, he shows, to be attended with less danger during the anæsthesia, and not to be "followed as inexorably by disaster" when recklessly administered. On the other hand, its dangers are greatest after the patient has recovered consciousness. These dangers come from the effects of ether on the kidneys and lungs. Admitting then that, on the whole, ether is less dangerous and should be chosen when anæsthesia has to be conducted by an inexperienced person, Dr. Gerster mentions three classes in which he thinks ether is positively contra-indicated. (1.) Cases of present or even suspected acute or chronic nephritis. (2.) On patients suffering from chronic pulmonary affections, especially if they be elderly persons. (3.) Those persons in whom ether fails to produce total relaxation. Under these circumstances chloroform should be substituted. He narrated a case in which acute nephritis set in on the second day after etherization for the reduction of an inguinal hernia. The patient died on the ninth day. The wound of the operation was healed. Similar cases in the practice of others were alluded to. That *chloroform* is a safer anæsthetic in Bright's disease is shown by the fact that "it has been employed for hours together without any accident in uræmic eclampsia."

A series of cases was then given in which pneumonia followed the use of ether. In the discussion which followed the reading of the paper, Dr. Gerster explained that he considered the cause of the pneumonia to be *not* the inhalation of the cold ether vapor, but the accumulation of "decomposing mucus in the oral cavity and trachea finding its way into the lungs and being the more probable cause of bronchitis or pneumonia." The third class of cases he had found to be a numerous one. In some "tolerance had been attained, while in others violent retching or coughing, or general tonic or clonic convulsive movements" made the operation impossible. As regards the use of chloroform, Dr. Gerster considers it "just as safe as ether in the hands of a well-trained and conscientious anæsthetizer." Valvular heart lesions do not contra-indicate chloroform. He says: "A weak heart, from whatever cause, be it fatty degeneration or great anæmia, or from nervous influence is the only valid objection to the use of chloroform." He thinks ether more than usually dangerous under these circumstances, but chloroform much more so. The paper concludes with a case of fatal chloroform narcosis from heart failure, the cause being, in Dr. Gerster's opinion, nervous depression and fear of the anæsthetic.

Following this paper, a letter was read from Dr. H. Knapp in which he states that he had up to 1874 used chloroform in 3000 cases, had had no accident in his own practice, but had seen fatal cases in Vienna and Berlin. Since 1874, he has used ether, and considers no general disease a contra-indication. In several hundred etherizations the average time required to bring about an-

æsthesia was one minute and thirty-seven seconds. Some of his operations could be performed during primary anæsthesia; others lasted for hours. The report of the discussion in the *Medical News* explains what Dr. Knapp means by "primary anæsthesia" in this language: "that is before profound narcosis is induced."*

Dr. R. F. Weir defended ether. He did not think it was contra-indicated in renal disease. He then gave the experience with ether in the New York Hospital since 1850. There occurred six deaths in 10,791 etherizations. As regards the fatality from chloroform on the other hand, a single journal, *The Lancet*, had published seventeen deaths in the eighteen months from January, 1869, to July, 1870. He thought that the records of hospitals generally would show ether to be followed by a smaller proportion of deaths than chloroform. Dr. Wier also commented severely on the reckless manner in which ether is frequently administered, as though it were a perfectly harmless agent.

The only surgeon who spoke emphatically for chloroform was Dr. Sayre. He made the point that the same care should be exercised in regulating the *dosage* of chloroform as is exercised in the use of other potent drugs. No one would use strychnia in the same uncertain doses as chloroform is used when it is given by the usual method: *i. e.*, by a folded towel, containing an unknown quantity of chloroform and held at an uncertain distance from the patient so as to allow the entrance of "pure" air with the anæsthetic. He uses an inhaler so constructed as to allow the patient to inspire only air impregnated with chloroform. He administers 10 to 30 drops, and with this amount "almost invariably produces anæsthesia by a few inhalations." If any heart trouble comes on, artificial respiration will soon eliminate this small amount of chloroform. On the other hand, if the patient inhales air with the chloroform, he is taking in the antidote with the anæsthetic, and hence a larger amount of chloroform must be given before its characteristic effects on the nervous system are produced, *i. e.*, before narcosis.

"If," adds Dr. Sayre, "the collapse occurs under such circumstances, when a large amount has been inhaled, and the whole system saturated with it (chloroform), it sometimes happens that even the most vigorous efforts fail to produce resuscitation."

The importance of Dr. Gerster's paper and of the remarks made by those who discussed it is evident enough to justify the extended quotations I have made. The decision as to the comparative safety of chloroform and ether is shown to depend on the individual case. It is, of course, well known that the presence of nephritis or chronic bronchitis—specially in old people—is usually thought to add to the danger of etherization. Dr. Gerster shows that the fundamental reason for this is that ether can produce nephritis in a *previously healthy* kidney or bronchitis and pneumonia in *previously healthy lungs*. In the fatal case of nephritis which he relates there was "no indication of kidney trouble previous to the operation." He mentions six cases of pneumonia, and five of serious bronchitis following etherizations. Of the pneumonias, four proved fatal, one, in a boy of 16, recovered, and one was accompanied by purulent bronchitis. In this latter the bronchitis lasted till the patient succumbed to his disease—rectal cancer—six weeks after the operation. Of two of the fatal pneumonias the condition of the lungs prior to the operation was in one, a mild bronchitis which "did not keep the patient—a woman, age 43, from attending to her household duties," and in the other "dullness over apex of right lung due to past pleuro-pneumonia." In the third fatal pneumonia the autopsy showed pulmonary emphysema, chronic bronchitis, a fatty heart and nephritis. In the fourth fatal pneumonia, the pneumonia with the purulent bronchitis, the pneumonia that recovered and the five cases of bronchitis, no mention is made of the *condition of the lungs before the operation*. The only note given from the autopsy of the fatal case is; "Lobar

Medical News April 16, 1887.

pneumonia of the lower part of the right lung in the stage of bloody engorgement." Unquestionably Dr. Gerster would have mentioned any other pathological condition which had been found in the lungs, and it may reasonably be said in the other cases that mention would be made of any lung trouble existing before the operation, if such trouble *did exist.* We may, therefore, not unreasonably infer that Dr. Gerster gives eight cases of bronchitis or pneumonia occuring after etherization in lungs apparently healthy. Dr. Gerster says that now that attention is called to the fact, many more cases of this kind will probably come to light. In any case his paper fixes one sharp distinction between ether and chloroform, the danger from chloroform is during anæsthesia and on the heart, that of ether after anæsthesia and on the lungs and kidneys. To protect the heart from chloroform paralysis is, and has long been, the aim of those who constantly use this anæsthetic. To an extent they have succeeded. The duties of carefully observing any bad after-effects of ether and of seeking some way of guarding against them, rest upon those constantly using this agent. The much more general use of ether makes the solution of this problem even more necessary than that in the case of chloroform.

The dangers of ether are not, however, limited to its after-effects. Dr. J. C. Reeve, of Dayton, Ohio, says in the American edition of *Holmes' System of Surgery:* "Ether in the human subject may produce death as suddenly, as unexpectedly and in the identical manner that chloroform does." In the *Medical News*, of January 8th, 1887, Dr. J. C. Packard, of Philadelphia, in reporting a case of death from the A. C. E. mixture, comments on Dr. Reeve's remarks. He says his search for such cases has been fruitless. "In every instance there was either previous disease or some pathological condition discovered after death which at least, in great measure, accounted for the fatal result." He mentions a case of sudden ether death reported by Lowe in the *British Medical Journal*, November 17, 1877, where the autopsy showed "both lungs studded with hard cancerous nodules, the liver adherent to the diaphragm, and the heart fatty." In the *News* of January 22nd, Dr. Reeves says about this case that neither the cancerous nodules nor the adherent diaphragm would be apt to cause sudden death. As to the fatty heart, he believes that "this is not a frequent cause of death *per se*; the patient must be subjected to some powerful disturbing agent." He significantly adds that had chloroform been used, there would be no question raised about what caused death. Thirteen cases are then given by Dr. Reeves of sudden death during etherization. Again in the *News* of February 5th, Dr. Packard considers these cases of Dr. Reeve's from a pathological standpoint. The pathological conditions in some of these cases are such that it is pretty hard to see how they can "in great measure account for the (sudden) fatal result." In three of them the "pathological conditions were" "extremely softened spleen" (I); "Woman, age 55, in very poor health (II); a girl, age 10, much emaciated and looking very ill; to be sounded for calculus," (xii). The following "pathological conditions" are also called on to acquit ether: Bright's disease (V); "lungs emphysematous, and bronchi filled with purulent mucus" (VII); "pleuritic adhesions and congested kidneys," among other things (VIII); "a feeble old man who died of copious bronchial secretion which kept filling the patient's mouth" (IX). The first three mentioned certainly do not explain the death in a great "measure." In the last four it may be asked whether, in the light of Dr. Gerster's paper, the pathological conditions present did not make chloroform safer than ether? Of the remaining six of Dr. Reeve's cases, case VI is Lowe's case already alluded to. No autopsy was allowed in cases III and X, but death occurred suddenly. In neither does there seem to have been any reason for not giving an anæsthetic. In case XIII a fibrinous clot was found in the right heart, a cancerous mass and purulent effusion in the abdominal cavity. The man fell back dead after three or four inspirations. On account of the

occurence of death so early in the anæsthesia, the medical men present did not think it was due to ether, although the post-mortem did not explain the sudden death. Case IV may have died of blood in the trachea. In case XI "the lungs were emphysematous the heart flacid and fatty" Thus there were two cases of fatty heart (vi and xi). This condition makes the administration of any anæsthetic more dangerous than usual,but the patient's heart stood a better chance with ether. Leaving out these, and the case in which there may have been blood in the trachea, we have left ten cases of sudden death from ether. In six of these there was no symptoms before the administration of ether to cause any alarm about the result of anæsthetization, nor did the autopsy in four of them reveal any pathological condition which would usually cause sudden death. In the other four there were conditions which, if Dr. Gerster is correct, not only aided in bringing about the fatal result, but made this result more probable with ether than with chloroform. Indeed the "purulent mucus" in case VII and the bronchial secretion which filled the patient's mouth in case IX are conditions which would almost certainly have been noticed, had they existed before the etherization. It is a question if ether may *not* have *caused* these pathological conditions which are cited in its defense. Dr. Packard also gives, in contrast to Dr. Reeve's cases, fourteen cases of death from chloroform. They occurred in persons of all ages, and slight operations. The autopsy in eleven of these showed all the organs healthy. In the other three there were found "a few old pleuritic adhesions" (I); "congestion of scalp and head" (V); and two small pulmonary cavities" (X). Of course these pathological conditions had nothing whatever to do with the cause of death. He adds that on the production of one case in which ether has proved fatal to a healthy young person, inhaling it for a slight operation and in which an autopsy shows no organic disease or lesion * * * objection to Dr. Reeve's statement falls to the ground."

Other cases of sudden death from ether could easily be produced. Vol. XLIV, No. 3, of the *Medical News*, gives an account of seven deaths from ether discussed at the meeting of the New York Surgical Society. All died suddenly. In four of them heart failure seems to have been the cause of death, while in the other three death came through trouble with the respiration. Another interesting case is reported by Dr. Roberts, of Philadelphia, in the *Medical News*, Vol. XLV, No. 13. Death came from heart failure. In all these cases the patient was advanced in life, and the operation a serious one—thus supporting Dr. Parkard's statement to a certain extent. In two of the cases (N. Y. Society by Dr. Sands) there had been great loss of blood.

One reason for the non-appearance of fatal cases from ether in young people, or in slight operations may be that men who usually use ether in severe cases, do not hesitate to employ chloroform for young people and short operations. Thus, I believe that Prof. W. T. Howard, of this city, frequently gives chloroform for vaginal examinations or short operations, while he uses ether in his severer operations. I believe this practice is more or less general. Fatal cases from ether given to young people for slight operations might be reported if ether were extensively used in this class of cases.

Another explanation of death from chloroform in trivial operations is the natural association of slight anæsthesia with slight operations. *It is a great mistake in the use of chloroform to commence an operation before complete narcosis is induced.* This rule is an old one, is in all our books, and yet is constantly violated. Bartholow insists on it in his *Materia Medica*, as also does Ringer in his *Therapeutics*. The anæsthetic sedates the heart, and if an operation, however slight, is performed before reflex irritability is abolished, a weakened heart is compelled to bear all the shock. Better give no anæsthesia at all. In Holmes' *System of Surgery* (edition of 1862) Mr. Lister narrates a case of "chloroform death." The operation was ampu-

tation of the penis. The surgeon "purposely abstained from giving it (chloroform) as fully as usual." He placed his finger on the wrist, found the pulse good, and "at once affected the operation almost instantaneously." Mr. Lister observed that the passage of the knife through the member was "*accompanied by a start of the patient's body.*" When the bandage was removed, no blood flowed from the vessels and there was no pulse at the wrist; "in short he was dead." The autopsy showed a heart "extremely affected with fatty degeneration." Mr. Lister states that his own impression was that if the anæsthesia "had been pushed to the usual degree the fatal occurrence would have been averted."

In February last Prof. William H. Pancoast, of Philadelphia, had a fatal case. The operation was "for the purpose of having adhesions of the finger tendons broken up." The patient was 30 years old. The autopsy revealed "diseased kidneys, fatty heart and liver and a thin right ventricle." This is all the *Medical News*, of February 19th, in reporting the case, has to say about it. The *Medical Times* of February 19th, contains an editoral upon this case. It says: "The physician who had charge of the anæsthetic was directed to *administer only sufficient chloroform to induce primary anæsthesia*, during which the adhesions could be broken by passive movements. The man, at the last inspired the chloroform rapidly. His face assumed a palid look and his pulse was imperceptible, and in spite of efforts at resuscitation he died almost instantly." The editorial concludes: "With regard to the case, there can be no doubt that the sudden death was due to the diseased condition of the viscera, as *complete anæsthesia was not induced or attempted.* Prof. Pancoast is ordinarily an ether giver, * * * * * * uses *chloroform for slight operations merely to prevent the sense of pain without producing loss of consciousness.* By chance I obtained from Prof. Chisolm a copy of the *Chambersberry Daily Register*, of February 11th. This contains what purports to be an extended interview with Prof. Pancoast. He is represented as saying that he uses chloroform by giving his patient "a few whiffs to deaden sensation only." Also that *during the operation* "the patient moved quickly, cried out as if from pain, and all was still." I know that newspaper reports and interviews on medical matters are usually untrustworthy. The latter report makes the patient die during the operation with only *partial anæsthesia.* The *Medical Times* makes the death come under the sad and entirely unavoidable class of heart paralysis from the anæsthetic. Whichever be true, one thing is clearly stated, that so high an authority as Prof. Pancoast performs trivial operations under *partial chloroform anæsthesia*, and does not, apparently, consider it unsafe. Men who habitually use this anæsthetic *do consider* such a course unsafe. All the recognized authorities on anæsthetics, so far as I know, have the same opinion: that it is more dangerous to operate under partial (or incomplete) anæsthesia than to either give no anæsthetic at all, or produce complete narcosis.

I have looked into the details of the fourteen chloroform deaths given by Dr. Packard as far as our library here would allow. Six of them (II, III, VII, IX, XII, XIV) I have failed to find because the journals containing them were missing. Of these fourteen, three occurred in dental practice. I found the report of only one of these and that told nothing. Of the remaining seven there is only one (Case I) in which the manner of conducting the anæsthesia can be in any way criticised. This will be alluded to later. Three of the remaining six died of heart complications early in the anæsthesia, one of sudden heart failure near the end of the operation, and two of fatal syncope from which they could not be aroused.

(*To be continued.*)

The Boylston Prize of the Boylston Medical Society of Harvard University, has been awarded to Mr. Charles L. Scudeler, for an essay on "Congenital Talipes Equnio-Varus"

Society Reports.

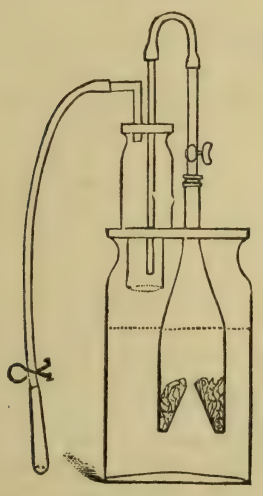
THE BALTIMORE ACADEMY OF MEDICINE.

STATED MEETING, HELD APRIL 19TH, 1887.

The President, DR. P. C. WILLIAMS, in the chair.

Dr. John Uhler exhibited a very simple

APPARATUS FOR GASEOUS INJECTIONS INTO THE BOWELS,



which can be made as follows: Take a tall glass salt mouth and bore through its tin cover a small hole at the center and a larger one near the circumference. Through the central aperture pass the neck of a bottle (with a small piece broken out of its bottom) so as to suspend it low down in the jar from a stop-cock on the outside, and slip over this stop-cock good rubber hose to connect it with the long glass tube of a wash bottle that stands in the large hole of the lid like a mustard pot in a caster. In like manner connect three feet of soft rubber hose, to the short glass tube of the wash bottle and slip its free end over the nozzle of a syringe with a spring clip near it to exclude air. As will be seen by the cut, the whole apparatus is but a combination of well-known chemical contrivances to supply gases automatically and to act by fluid pressure, and we have only to introduce some lumps of carbonate of lime or magnesia into the generator and pour dilute sulphuric or muriatic acid into the jar to start it into action. As a rule it should be made large enough to force out the gas rapidly, and when once charged can be used until all the carbonates in the inner bottle disappear. When freshly charged the rectal tube should be raised while the stop-cock and clip are partly open to expel the air by carbonic acid, and then the sulphur water should be rapidly introduced into the wash bottle and the cork tightly closed while the gas is still passing. By this means we will prevent much contamination of the air by sulph. hydrogen, and the colic which is due to the admixture of air and gases in the bowels. To absolutely prevent the entrance of air, a third glass tube with a funnel on its top, (to be closed by a stopper or glass stop-cock) may be introduced to the bottom of the wash bottle to fill it with sulphur water, but as every hole in the cork increases the liability to leakage it is generally better dispensed with. When a small apparatus is used a Davidson's syringe may be interposed between the generator tube and wash bottle to drive the gas by hand-pressure through the sulphur water into the rectum, but with a good-sized jar the dilute acid alone should do the work. The apparatus has been used with red, white, and various sulphur waters, but he is not satisfied that we at all times get enough sulphuretted hydrogen from them when employed twice a day and therefore suppliments the gaseous administration by the use of the waters as a drink in the intervals. He also thinks that sulph. hydrogen is not so readily eliminated from the rectum as is generally believed, since it is nearly always present there as flatus, yet we do not often notice it passing from the breath, giving odor to it. Again if gaseous distention is so frequent in uterine cases, typhoid fever, and when the bowels are affected is it not reasonable to suppose that a tubercular bowel will offer like impediments to proper absorption? The quantity of gas to be used is also a matter of importance, and if three litres are ordinarily required, then a certain amount of over-distention must ensue

and the gas may not after all be entirely absorbed by the rectum proper. The whole subject needs careful scrutiny at the hands of the physiologist to find out if sulphuretted hydrogen in health is not altered in some way by the secretions of the bowels, pancreas, liver, etc., since the gas is so seldom belched and the valves of the intestines are hardly tight enough to entirely exclude it from the stomach, nor is it probable that the whole of the gas is used up in precipitating some mineral constituents of the food. For the best work it may likewise be important to know whether carbonate of lime or magnesia is most suitable to be used in any particular condition of the bowels to furnish the gas so as to disinfect, act on, or constringe them, and from a physiological standpoint to find out if sulph. hydrogen is a real disinfectant of the normal healthy body. The importance of this latter question to the hygienist is scarcely to be estimated since if this gas is found in less quantity in the bodies and fæces of those affected with phthisis or other maladies than in health it may have something to do with their so-called vulnerability, inheritance or tendency to take certain diseases.

DISCUSSION.

Dr. Thos. F. Murdock thought that sulphur water was objectionable because it is liable to cause purging.

Dr. P. C. Williams thought that the principal danger of sending phthisical patients to the Red Sulphur Springs was the climate.

CHRONIC MYELITIS.

Dr. P. C. Williams reported a case in which he prescribed iodide of potash, bromide of potash and sulphate of strychnia in the same prescription. The case was one of chronic myelitis, caused by syphilis in a man who had contracted it from his wife, who in turn took it from a midwife. The druggist sent the bottle to his office and said the incompatibility of the ingredients had caused a precipitate of the iodide of strychnia. Dr. Williams said he had not known of the danger of such a compound and simply related it here to warn others.

Dr. Uhler was uncertain what the precipitate was, but thought that, although chemically incompatible, the prescription would be therapeutically active if the bottle were thoroughly shaken before taking each dose.

Dr. Bombaugh thought there was too little sulphuric acid in the sulphate of strychnia to cause any remarkable change.

Dr. Canfield read a paper on

SOME COMPLICATIONS OF CHRONIC END-ARTERITIS.

Dr. W. P. Chunn read a paper on

TREATMENT OF RETAINED PLACENTA.

DISCUSSION.

Dr. B. B. Browne thought it might be generally correct to remove the placenta, but in cases where the placenta had been retained for a long time before coming under observation and when the woman had septicæmia he doubted whether she could stand such an operation. He thought it was the best plan to run the chances for the woman and remove the placenta if possible.

Dr. Bombaugh spoke of the method of dealing with retained placenta among the Indian tribes in the far West. Dr. Woodward, who is employed by the Department of the Interior among the Dacotahs, was called by an Indian midwife to a case of retained placenta. Reaching his hand under the blanket of the squaw, he found a heavy stone attached by a string to the cord. On inquiry as to its meaning, he learned that the woman had been marched up and down the lodge for hours with the weight tugging on the cord until she became exhausted. He also learned that this manner of removing a retained placenta is customary among the Indians. Dr. Woodward had obtained no data as to results, but was told that the rate of mortality was favorable.

Dr. Uhler asked how many cases of death after abortion from septicæmia the gentlemen had seen.

Dr. Chunn had never had a case, because he had treated all by scooping out the placenta.

Dr. Browne thought there was no doubt that many died in this way. In fact he could recall cases which died in this way, in his early career, especially at the time of Dr. Buckler Jones who produced miscarriage on women.

Dr. Uhler could recall no such cases.

Dr. Murdock thought Dr. Browne was not answering Dr. Uhler's question. Dr Uhler meant natural abortion. Dr. Murdock used ergot and the tampon, and thought it was much safer than to dilate the uterus.

Dr. Williams thought that two interesting points had been brought up; one by Dr. Browne, who suggested letting the woman run the chances. He thought at times the placenta should be removed. The other point was by Dr. Chunn. Dr. Williams asks if it is good practice in every case to dilate the uterus and remove the placenta. This is open to question. When there is no fever he lets it alone. He has never seen a death after miscarriage, either from septicæmia or hæmorrhage. He advocates letting the woman alone until some pathological symptoms appear.

Dr. W. C. Van Bibber said he had never seen death after miscarriage.

Dr. Thos. B. Evans made the same statement.

Dr. Taneyhill thought a conscientious physician was uneasy until the placenta was out and he was in favor of using an instrument to remove it. He reported a case in which a woman would not allow the use of an instrument; so after three weeks he put in a tampon with belladonna just before her time and then gave aloes and myrrh with senna and she delivered herself of a large placenta, which was so moldy that he could hardly recognize it. Dr. A. C. Abbot made an examination of it. In another case he used the placental forceps as dilators.

Dr. Chunn agreed with what Dr. Taneyhill said.

BALTIMORE MEDICAL ASSOCIATION.

STATED MEETING HELD APRIL 11, 1887.

The meeting was called to order by the President, Dr. Thos. B. Evans.

The committee of honor reported favorably upon the names of Drs. Henry B. Gwynn, John D. Lickle and Thos. J. Edwards. These gentlemen were then unanimously elected.

PATHOLOGICAL SPECIMENS.

Dr. J. W. Chambers exhibited specimens of the kidneys, a portion of the liver and the spleen, taken from a woman who died, aged 67. The patient had been under the care of several physicians and her case has been variously diagnosed. Most of the physicians, however, agreed that she had contraction of the stomach. She had been taking nitrate of silver five or six years.

The symptoms presented during life were chiefly nausea and vomiting. The urine afforded no indication of the existence of Bright's disease. The kidneys, however, were found, after death, to be contracted. Dr. Chambers thinks her symptoms were due to the kidney trouble. She died from inanition, being absolutely unable to retain anything upon the stomach.

All the organs were deeply pigmented except the mucous membrane. A number of gall stones were found throughout the liver and in the ductus communis.

Dr. Chambers thinks the sp. gr. of urine a very important indication of contracted kidney, and of more value, as a general rule, than other tests, such as for albumen and casts. He thinks whenever the sp. gr. is persistently low, without other assignable cause, there is likely to be contraction. In this case, Dr. Chambers noted that the whole alimentary tract was contracted and he attributes this to lack of use in process of digestion.

DISCUSSION.

Dr. G. J. Preston thinks Dr. Chambers overrates the importance of sp. gr. as an indication of the contracted kidney. He thinks the existence of left hypertrophy is the most important indication of this condition. He thinks the nitric acid test for albumen the most satisfactory if properly conducted. He admits the difficulty oftentimes of detecting small quantities of albumen with this test, but thinks if a small test tube is used containing acid, and urine is slowly dropped in, the test will generally succeed if albumen be present.

Dr. G. H. Rohé said that the statement had been made on the authority of Osborne that gall stones were very frequently found in women suffering with malignant disease, and asked if the experience of members present bore out the assertion. He does not think himself that any special connection between the two conditions is justified by facts.

Dr. King, referring to the existence of the discoloration from silver, of the intestinal viscera, said he was of opinion that silver only discolored the skin.

Dr. B. S. Roseberry said if nitrate of silver were given for a sufficiently long time the discoloration of the intestinal organs would take place. He called attention to the fact that light is not an essential element for the production of discoloration, but whenever the silver salt is brought into contact with organic material it will be decomposed and the characteristic dark color produced. Hence he thinks Dr. Chambers correct in assuming the pigmented condition of the specimens exhibited to be from the use of silver.

Dr. Chambers, replying to Dr. Preston, said, that in his opinion, the determination of the presence of a small amount of albumen in the urine is not a diagnostic sign of much valve. It is frequently found in small quantities under many varying circumstances.

Dr. Preston did not mean to lay very great stress upon this sign alone, but thought all signs should be given due consideration in arriving at a conclusion and would rank left-hypertrophy first, albumen in urine second, and sp. gr. third, in importance in diagnosing contracted kidney.

Dr. Joseph T. Smith said that any urinary test to be of value should be frequently repeated, as the results varied greatly with different examinations. As to the gastric irritability in this case, he thought it was most likely caused by original stomach trouble, aggravated by the deranged condition of the kidney.

Dr. Chambers next reported four cases of

HÆMORRHAGIC DIATHESIS.

Case I, was a male, aged 30. The condition had existed since the individual was 10 years old. Last fall this patient was taken with typhoid fever. Bleeding from the pharynx, of a very obstinate character, set up. Other means failing, it was finally (apparently) controlled by the galvano-cautery. Dr. Chambers, however, rather doubts the efficacy of the cautery in this case and is inclined to think that cessation of the hæmorrhage was spontaneous, as sometimes happens. In this family there are one or two others subject to the same diathesis. There is also in the family, a history of rheumatism.

Case II, was a boy, aged 6 years. This boy died after the operation of tracheotomy. He had been under observation about a year. He was of Hebrew parentage. There was no heriditary influence, neither parents nor grand parents, on either side, had been similarly affected. With the boy, any slight blow or injury was sufficient to cause a hemorrhage. He was placed under tincture of iron and arsenic and became less liable to the attack. He went on in this way until 1885, when for laryngeal stenosis, tracheotomy was done. He did well for two days, when hæmorrhage came on from the mucous side of the wound and continued till death.

Case III, boy, 3 years old. Died of diphtheria. Dr. C. rather doubts the propriety of calling this a case of original hemorrhagic diathesis, but thinks the condition was brought about by the remedies employed in treating the dis-

ease. The child had been healthy previously and there was no hereditary influence. He was taken sick with diphtheria in September. He was given five grains of iodide of kalii and a half a grain of hydrarg. bi-chlorid. every three hours and kept nourished. For a few days he seemed to improve but on the twelfth day, the child showing weakness, the murcury and potash were withdrawn and tinct. ferri given, and stimulants pushed. He took as much as a half a pint of whiskey a day. On the day after the change in the treatment, he seemed better and there was no special evidence of stenosis. On the second day be began to bleed from the nose. The mother said this was habitual with him. The epistaxis kept up all day, the child became very weak. Ergot and sulph. acid were given, but the hæmorrhage continued all night and in the morning blood was passed both per rectum and by emesis. He died in twenty-four hours.

Case IV, male, 48 years old. He was in good health until 1864, when he was discharged from the army for chronic diarrhœa. His family history was good and his ancestry long-lived. It was said his mother had died of cancer. His illness dated back one year from the time when first seen. At that time he had jaundice, thought to be the result of chronic malaria. In about six months he was taken with non-specific urethritis. This troubled him four months. He then had an urethral hemorrhage, also epistaxis and bleeding from the gums. The urethral hæmorrhage was checked after a few days. There was splenic enlargement. Six days before death hæmorrhage from the urethra again occurred and this was repeated on the fourth day before death. On the third day before death, Dr. C., saw him. He was then very weak from loss of blood. Over the hypogastric region there was a large tumor, taken to be the bladder, distended. It was tympanitic high up, but duller low down. A catheter could be easily passed, but it promptly filled with blood. Dr. C. first thought of opening up the perineum but after reconsideration did not do so. After death, examination revealed the bladder full of blood. Kidneys were in good condition and genito-urinary tract fairly healthy. The cellular tissue around was full of blood. Spleen was enlarged and contained some blood clots. Liver was nearly normal but contained some hæmorrhagic spots. Dr. Chambers, summarizing these cases, said: In the first case there is no evidence of hereditary influence. As the converse is generally thought to be true, this is a point of interest. As to the second case, he had learned from the literature that the condition is quite common with Hebrews. The third case he believed was acquired by the use of mercury and potash. In the fourth case he thinks death may be legitimately attributed to loss of blood. There was no condition of the abdominal organs to explain it. He thinks from a consideration of these cases, that the influence of heredity is overrated. He referred to the literature of the subject, crediting the English and Germans with the most thorough research. He thinks traumatism the most frequent exciting cause. The skin is not often the source of oozing. It is very much more frequent in women than men, the proportion being about as 13 to 1. He thinks the assumed relation between this condition and rheumatism not well made out. He thinks the supposed rheumatic pains in points due to effusion of blood. Rarely manifested before the first or second year of life, persons of hemorrhagic diathesis seem to stand depletion better and rally sooner than others. Little is known of its pathology. Some think it is due to arterial change, others, to change in the capillaries, while still others think the whole vascular system is involved, the principal element being exalted blood pressure. As to treatment he recommends iron, arsenic, nourishment. If the extra blood pressure is accepted, he advises saline cathartics.

DISCUSSION.

Dr. Blake has had one case of the kind, a boy 5 years old, who frequently bled from the nose and gums and the slightest injury was sufficient to bring

on a hemorrhage. He was under observation four years. Upon four or five occasions it was thought the hemorrhage would terminate fatally, but he rallied comparatively rapidly. There was a history of phthisis, a grand father and two brothers having died of this disease. The boy finally died from hæmrhage brought on by the extraction of a tooth.

Dr. Roseberry called attention to recent reports of salicylic acid as a hæmostatic.

Dr. G. H. Rohé said that in two of Dr. C.'s cases the diathesis was evidently congenital. He asked if there had been any trustworthy experiments conducted to determine the condition of general blood-pressure in this class of cases.

CASE OF HYSTERIA.

Dr. J. H. Scarf reported the case of a young lady whom he was called to see, on Sunday night three weeks ago and twice since at intervals of a week, (each time about the same hour Sunday night), the patient having an epileptiform convulsion each time. Upon the last occasion she fell, while standing in front of her dressing case, striking a piece of furniture with her head. She did not regain consciousness until the following Tuesday. When she did, it was found that the right side of her face, both as to sensation and motion, and the special senses of sight and hearing were paralyzed. There was no paralysis below the face but a slight numbness in right arm. The paralysis was limited by the median line. Face not drawn except when she laughs.

It was the opinion of those who discussed it, that the attack was hysterical.

B. S. ROSEBERRY,
Reporting and Recording Sec.

The Royal College of Surgeons and the Carmichael College of Medicine, of Ireland, are talking of amalgamation. The feeling between medical schools in Ireland must be different from that which obtains in America. We could hardly imagine two medical schools of the U, S. amalgamating.—*Ex.*

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD APRIL 7, 1887.

The President THOMAS M. DRYSDALE, M.D., in the chair.

PYO-SALPINX IN ITS RELATION TO PUERPERAL FEVER.

Dr. J. M. Baldy presented this specimen, not simply because it was one of pyo-salpinx, but because of its extremely important relation to the puerperal state and, as far as he is aware, because it is the first of its kind ever operated upon, and life saved when the patient was dying from, so-called, puerperal fever.

The patient, Mamie P., 23 years of age, was delivered of a male child after a tedious but normal labor some four years ago. She was at that time confined to her bed for eight weeks with "an inflammation in her stomach." She however, made a good recovery and has not suffered from pain or ache in her abdomen since. On February 3rd, 1887, he was called to attend her in her second labor. Although he went with the messenger, he found labor over; a dead child, together with the placenta and all the membranes intact, lay between her thighs. Her uncovered arms chest and legs were exposed in a room without a fire. No examination was made, but she was put between warm dry bed clothes as quickly as possible. On the second or third day she had a chill with a quick rise of pulse and temperature, a tympanitic and tender abdomen. These symptoms abated somewhat, and he lost sight of her for several weeks. On the third of March, one month after her confinement, he was again summoned to her and found that she had been suffering eversince he had last seen her. She had become so emaciated that he hardly recognized her. Her temperature was 102° and pulse 130. She had continued chills and creeps, hectic, night-sweats, and sleepless nights; her abdomen was swollen and tympanitic and intensely painful, her bowels

loose and fœtid; micturition and defecation were both painful. She was evidently fast approaching death. An examination of the soft parts showed no sign of a recent tear. The uterus was sub-involuted and on the left side there was a large boggy mass firmly adherent, tortuous and extremely tender. The right side was tender but no mass could be detected. Abdominal section was advised as the only hope of saving her life and the proposition was eagerly accepted by the patient and her friends. Dr. J. Price saw the patient and confirmed this opinion of immediate operation. He operated on March 5th, the delay being necessary in order to have the surroundings cleansed. Drs. J. Price, McMurtrie, of Danville, Ky., and Mr. Eckman, of Scranton, Pa., were assisting. The right tube and ovary were healthy and were not removed; left tube was almost as large as the uterus and firmly adherent in all directions, especially to the bowels from which it was separated with great difficulty. An abscess of the cellular tissue was ruptured while breaking up the adhesions and pus welled up through the abdominal incision. Both tube and ovary were removed. A large cheesy mass on the bowel at the point of adhesion was trimmed down with scissors and Monsel's solution applied to the bleeding points. After a free irrigation, a drainage tube was put in and the incision, which was only one and a half inches in length, was closed. The tube was found to be distended with pus, the ovary was disintegrated and contained pus. The patient rallied quickly and had no shock, her pulse fell 80, and her temperature to normal within twelve hours and remained so. The tube was removed on the seventh day. There had been little or no pain, no catheter, no laxative or drug of any kind had been employed. The day after the removal of the tube her pulse began to rise as also did her temperature. Pain developed in the left ovarian region and she began to have hectic and creeps. About the eleventh day there was a free gush of pus from the tube tract and she began to improve again from that moment. A rubber tube was inserted and passed deep into the pelvis and the abscess was washed out twice daily. The discharge gradually diminished and the tube was again removed. The wound is now completely healed and the patient is a well woman.

The belief that a certain proportion of our puerperal fever cases, are simply cases of salpingitis septicus is by no means a new one and is probably held by most of the great operators in the world. Dr. M. Sänger says that "salpingitis septicus coexisting with severe puerperal septicæmia has never as yet given the surgeon an opportunity to remove the principal focus of disease by the extirpation of the tubes. It is possible, however, that under certain circumstances such a proceedure might be indicated." Dr. Carl Schroeder holds that "septic endometritis does not extend to the tubes as a rule, occasionasionally, however, it does go on to a purulent salpingitis." That these cases do exist much more frequently than we have had any idea of is certain and that oftentimes a life otherwise doomed can be saved by operative interference is proved by the case presented to-night. Mr. Tait mentions four deaths from this cause in Queen Charlotte Hospital alone and says "that these cases were, during life, all regarded as puerperal fever." Dr. A. Martin, out of a total of two hundred and eighty-seven cases, found that seventy resulted from the puerperal state. Dr. Sänger mentions two cases which have come to knowledge in which the over distended tubes burst and discharged pus into the abdominal cavity with death on the fourth day after confinement in one case and on the twenty-first day in the second case. He thinks that in both these cases the salpingitis existed before delivery and mentions a case in his own practice in which this certainly was the condition. Hecker, as early as 1878, mentions two cases in which the pyosalpinx was old and was only lit up by the puerperal state. Whether the disease arises *de novo* or having already existed from other causes is simply lit up by the puerperal state must be determined in each individual case. Hecker's and Sänger's cases as mentioned

had a pre-existing salpingitis, but in the seventy cases reported by Martin the micro-organisms of puerperal septicæmia were found in the contents of the tubes and no mention is made of any other micro-organism; so it is fair to presume that these cases arose from the puerperal state pure and simple. Of course the possible contagion of gonorrhœa can never be eliminated except by a microscopic examination. In his case although the trouble seemed very clearly to have arisen at the second time of labor, possibly with her first labor also, yet the chance of gonorrhœal infection both before and after her first pregnancy are so great that he cannot pretend to say it was not present. The operation has up to this time been done at least four times in Philadelphia; one case was operated on just two weeks previous to mine by Dr. Longaker, in which a pyosalpinx was found and removed, the patient dying on the second day. Dr. J. Price has since operated twice and in one found more than a quart of pus in the abdominal cavity. The case unfortunately fell into his hands too late and the patient only survived two days. These cases though few in number, certainly teach us that the work done in this direction is encouraging, and although a large percentage have died, it only warns us of the extreme importance of an early diagnosis and prompt surgical interference. It becomes our imperative duty in every case of post puerperal trouble to make a thorough investigation of the appearance of the first symptoms, and should a fullness be found on either or both sides of the uterus accompanied by pain on touch and with constitutional symptoms of gravity, there should be no hesitation as to the course to pursue. This being secured our present high mortality of one woman out of every hundred deliveries in large cities, as recently stated in a statistical paper on lying-in-charities in the United States must be largely diminished and the fatal influences now surrounding our parturient women must become infinitely less

DISCUSSION.

Dr. J. Price remarked that the operation in this case was difficult and tedious and was done with great care. He believes that conception can take place coincident with desquamative salpingitis. Salpingitis even of gonorrhœal origin may affect one tube only, and the other, being normal, may give exit to an ovale. Six months ago he removed a large pus tube from the right side; the woman is now four months pregnant. If he finds induration and distention of a tube with inflammatory symptoms during the post parturient period he does not hesitate to operate at once, the operation involving less danger to the patient than the rapid progress which the inflammatory process will take at that period. He read from a letter from Mr. Tait: "There can be no doubt as to the frequency of the occurrence of puerperal pyo-salpinx; and what we want to do, is to hammer at people until we get them to open the abdomen in primary puerperal peritonitis." Dr. Price does not think septic post-partum salpingitis would be unilateral. He would also call attention to the extreme degree of degeneration that has taken place in the tissue of the tubes themselves, and most commonly unilateral only; they are quite cheesy in character. This change could not occur in so limited a space of time, a few days only.

Dr. Longaker remarked that one of the four cases, referred to by the author of the paper, was a patient who was under his care and who died forty hours after operation. Briefly, the history of the case is as follows: A young woman from Maryland came to my office, being in the sixth month of her first pregnancy for treatment for a profuse muco-purulent discharge having all the characteristics of a recent gonorrhœa. A month later premature labor set in. The child did not live. The placenta came away entire. Four days after labor she began to complain of a severe pain in the left inguinal and hypogastric regions, paroxismal and associated with great tenderness. The tongue was dry but there was no nausea or vomiting. There was no chill but the temperature was slightly elevated. The same symptoms continued for the next two days. On the morning of the eighth day, 7 A. M., she began to complain of intense cutting

pains, temperature 96.5°, pulse 96. Four hours later, under the free use of morphia the pain was relieved, the temperature had risen to 102° and the pulse to 120. Dr. Jos. Price kindly saw the case with him, and they agreed on the advisability of laparotomy. During the afternoon her temperature continued to rise reaching 104° in the evening. On the following day she was much better, was free from nausea and vomiting and had no severe pain. Owing to this improvement Dr. Longaker allowed himself to be persuaded to put off operating. The abdomen was opened February 14, 1887, the ninth day after delivery and nearly sixty hours after the onset of acute peritonitis. General peritonitis and a large quantity of pus in the region of the left cornu uteri, exceedingly foul in odor, were found; the left tube was removed it was an inch in diameter. The uterus was fairly involved, it was firmly fixed in the pelvis. The wound was drained after operation. Is it not assuming too much to these cases to claim pyo-salpinx had existed before conception? He is sure such was not the case in his patient. Though she had lived irregularly with a man for five years, she had at no time such symptoms as would lead us to suspect this disease. It would be possible if pyo-salpinx be the consequence of a poison without, to find entrance to the tubes during the first three and a part of the fourth month before decidua vera and reflexa become firmly united, but the result would be most likely be an abortion at the time of invasion. The morbific matter probably obtained access to the tubes after parturition is completed and owing to combined circumstances acts in an explosive manner. Is not the pyo-salpinx originated after labor as the result, it may be of a gonorrhœa contracted between conception and labor or before conception?

Dr. Hirst presented a specimen from a case of

VIRULENT PURULENT SEPSIS

by permission of Prof. Parvin in whose service the case occurred.

The specimens are interesting, not merely because they come from a case of puerperal fever, which unfortunately is not a rare disease, but from the rapidity with which the disease terminated fatally, and from the possible point of entrance of the septicæmic poison. The history of the case before delivery presents nothing worthy of note. Immediately after delivery, the temperature was 99.5° and in spite of the most energetic antiseptic treatment of the vagina and uterine cavity the temperature rose to 102° but dropped again to 99.5° only again to rise to 102°, where it remained till the woman's death about seventy-two hours after the birth. The post-mortem examination showed diphtheritic patches in the vagina, extending into the cervical canal. The uterine cavity and walls were normal; the peritoneum, tubes and ovaries healthy; the kidneys were the seat of numerous metastatic abscesses and there were several infarcts in the liver. The lungs were healthy. The rectum was covered with extensive patches of diphtheritic membrane; a very interesting condition for it indicates the possibility at least that here was the point of infection, and if this is the case, this specimen at once assumes considerable importance for he knows only three such cases in medical literature, one by Winckel, the others by Koester and v. Recklinghausen. These specimen may well serve to call attention to the possibility of infection by the administration of enemata and to the importance of observing the most minute precautions as to the chemical cleanliness of every instrument that may come in contact with the parturient or puerperal woman.

Correspondence.

THAT YEARS' WORK AT THE PRESBYTERIAN EYE, EAR AND THROAT CHARITY HOSPITAL OF BALTIMORE CITY.

BALTIMORE, May 11th, 1887.

Editor of the Maryland Medical Journal.

DEAR SIR:—It gives me much satisfaction to know that an old method of treating cataract cases after extraction operations, which had been nearly forgotten, and which the work at the Presbyterian Eye and Ear Charity Hospital of Baltimore has been the means of reviving and of forcing upon the notice of the profession. Abroad as well as at Home, is deemed of so much importance that claimants

for its reintroduction are springing up from every quarter. It now seems that surgeons knew all about it, and I am ready to confess that they did; for there seems to be nothing new under the sun.

When I attended the Eye Clinic of the elder Desmarres, in Paris in 1850 and 1851 the only method that I saw in use for dressing eyes after cataract extractions, was by adhesive strips. In his earlier work on Eye Diseases, published in 1847, Desmarres explains why he preferred these adhesive straps to compresses and bandages used in some parts of Europe. In the second and enlarged edition of his work on Eye Diseases, published in 1858, he says that the single piece of adhesive plaster, as a dressing after cataract operations had become of universal use in Europe. Dr. Agnew saw it in use at the Royal London Ophthalmic Hospital in 1855. This single piece of adhesive plaster as the sole dressing was not removed for seven or eight days. This was the dressing that I saw on cataractous eyes when I again visited Paris in 1859. There were at that time no special Eye Hospitals in Paris. Cataracts were treated in the open general surgical wards, as were any other surgical operations, and the eye patients were compelled therefore to take the light as did the others.

Thirty years ago Paris was considered the centre for medical learning, and a very large number of American Physicians sought hospital instructions there. Desmarres' Clinic was a favorite resort. Hundreds must have noted the adhesive plaster dressings after cataract extractions, and therefore must have brought the knowledge of it to this Country. Dr. Agnew, Dr. Michel, myself, and a great many others were of this number.

As the question is evidently being asked, who devised the plan of treating eyes after cataract extraction with adhesive plaster strips as the sole dressing, and the patient kept in the ordinarily lighted surgical wards of a general hospital during the treatment, I must say that it antedates the present generation of eye surgeons, and can be claimed by no surgeon now living.

In 1866 I went again to Europe for the especial purpose of studying eye diseases, my work up to that time having been in the line of general, not eye, surgery. At this time I found that the adhesive plaster dressings had disappeared altogether from hospital work. Compresses and bandages had become the universal dressing, and eye patients were being concentrated in the dark wards of a special Eye Hospital, or in dark rooms especially assigned to eye patients in the general hospitals. On my return to the United States I gave up general surgery, restricting my professional work to the treatment of eye and ear diseases and changed my home from Charleston, S. C., to Baltimore, Md. Naturally I adopted the method of dressing which I found in universal use and which I continued to use till May, 1886.

It would seem that the adhesive plaster had never been altogether abandoned either in this country or abroad, and was used sporadically by individuals. It was, however, so little known or generally thought of that I am safe in saying that prior to 1886 applications of compresses and bandages, in some one of the many forms, comprised the authorized after-treatment of cataract extraction cases. In support of this statement examine any work on Eye Diseases written during the past fifteen years.

As to exposing cataract eyes in light rooms I again say that it was not the custom in general use prior to 1886, not even by Dr. Agnew. He as we all know allowed light in the wards for the convenience of the surgeon and the attendants, but the patients eyes were covered by a *black silk bandage* which kept them in darkness. See a paper entitled: A Method of Dressing Eyes after Cataract Operations, by Dr. C. R. Agnew, published in the Transactions of the Ophthalmological Society for year 1869, extract, "That it is a clinical desideratum to be able to treat a case of ophthalmic surgery in a well lighted room *without admitting light to the wounded eye,*" taken from a letter from Dr. Agnew, which appeared in the *N. Y. Medical Record*, July 24, 1886. *The new treatment consists in exposing the eyes of the patients operated upon for cataract, to the light*, and is designed for their exclusive benefit, not for the surgeon and nurses. A very different thing from the lighted rooms of Dr. Agnew, whose patients were still kept in darkness.

When I attended the meeting of the National Medical Association in St. Louis, May, 1886, I was thrown much with my fried Dr. Michel, both of us natives of Charleston, S. C. He mentioned to me that he used adhesive plaster in dressing for cataract patients, and did not confine them to dark rooms; moreover that he got as good results in practice as did his neighbors who used compresses and dark rooms. In pondering over the matter I thought it of sufficient importance to bring it up for discussion in the Section on Ophthalmology, for the purpose of finding out whether this method of treatment was pursued by others. I make the following extract from page 128 of *The American Journal of Ophthalmology*, Report of the Ophthalmological part of the Section of Ophthalmology, Otology and Laryngology, Wednesday May 5. "On motion of Dr. Savage, Dr. Chisolm was then requested to make some remarks on iridectomy. He stated that he had got a statement from Dr. Michel, of this city, which had startled him, viz.: that he did not longer bandage nor confine patients after iridectomy or extraction had been performed, and that his results were better than before. The discussion brought about some severe criticisms on such action, and it seemed to be the feeling of the majority that to let well enough alone was wiser, until it could actually be proven that something was really to be gained by such a procedure. Dr. Chisolm stated that he for one was going to test, whether the artificial photophobia, which is undoubtedly caused by the bandaging, could not be dispensed with, without causing other disagreeable results, by not bandaging such eyes." The members of the Section had but little experience with this treatment and did not regard it with any favor whatever. Had it not been for myself the

topic would never have been discussed, and I think that I can say, with the exception of myself, the subject was forgotten before the Section adjourned.

During my ride home, to Baltimore, from St. Louis, 1000 miles, I had ample time to carefully weigh this method theoretically, and to determine in my own mind reasons why it might possess advantages over the universally used compresses, bandages and dark rooms. On reaching home I at once put in practice the subject of my meditations. In three weeks with the large amount of material at my command at the Presbyterian Eye and Ear Charity Hospital of Baltimore, I had experimented sufficiently to give publicity to the work in the early June number of the MARYLAND MEDICAL JOURNAL. In a July number of *News York Medical Record* the subject was still further discussed, my reasons for my change in the treatment being clearly set forth, and giving Dr. Michel credit for having brought the matter to my notice.

Another article, also on the same subject, appeared from my pen in the June number of the *American Journal of Ophthalmology*. These papers were extensively commented upon. at the time, in the various medical journals of the United States, and also in many European medical journals. The reasons given by me for the change of treatment were so convincing as to induce many specialists to try for themselves, when they in turn became enthusiasts for the new treatment. Extract of an article on this subject in the *London Lancet* for Sept. 18, 1886, by Simeon Snell, Esq., M.R.C.S. "I am free to confess that I have seldom seen a paper that more directly appealed to me as to the justice and reasonableness of the conclussions setforth."

I have no desire to rob Dr. Michel or Dr. Agnew of any credit whatever. Most gladly would I add, were it possible, to the well-earned reputation of both of these distinguished ophthalmic surgeons. Say what you will, however, the grit of the whole matter is the heading of the correspondence in the MARYLAND MEDICAL JOURNAL, May 7, 1887, by Dr. W. Cheatham, of Louisville, Ky. "*That Years' Work at the Baltimore Eye and Ear Charity Hospital, by Dr. J. J. Chisolm.*" If *that* work had not been done would the subject be under such warm discussion to-day, and would leading ophthalmic surgeons at Home and Abroad be fighting for the priority of the suggestion? I heard of a treatment which impressed me as differing from one in universal use. The more I pondered over it the more valuable I thought it might be made. Within a week I had tried it, and by the end of a month my experiments were sufficiently numerous and successful to warrant their publication. This first article was rapidly followed up by others, urging Specialists to try the plan proposed, when I felt assured that they would also adopt it.

Dr. Michel, in a paper in the September, number of the *Archives of Ophthalmology*, 1886, writes: "While pursuing my studies with Desmarres in 1857, it occurred to me that there were no good reasons for the dark room and bandages then and yet in general use after operations. I determined as soon as possible to test the question for myself. Soon after my return to the States the war commenced, and I had but few opportunities to put my convictions into practice, but the cases treated at long intervals between 1861 and 1870, so strengthened me in my belief that I soon after entirely emancipated myself from the old routine, and now for the past 12 or 15 years have discarded bandages and darkened rooms." In this connection read extract from second edition of Desmarres' Work on Eye Diseases embodying his experiences and practice at his Eye Clinic in Paris, 1858, p. 233. I give the literal translation. "I have slightly modified this adhesive dressing for some little time (He refers to applying 5 narrow strips, as recommended in the first edition of his work, printed 1847). I cut a single piece of court-plaster a little oval transversely, and capable of covering the two lids closed. I make a notch in the plaster at the large angle, (the inner canthus) sufficiently large to allow the conjunctival secretions to flow away."

Dr. Michel, for the better results obtained by him had evidently resumed the old methods of treatment which he saw in use at Desmarres' Clinic in 1857, and which he used more or less constantly from 1861 to 1886, 25 years. Yet during these many years the world, suffering from cataracts, were imprisoned in dark rooms under hot, thick bandages. Why did Dr. Michel keep this better method to himself? Why did he not tell us all about in 1870, or in 1875; in 1880, or in 1885? Had he told his professional neighbors in his own city they might have tried it for themselves and possibly given the results of this good work to those so anxiously awaiting the news. Had it not been for the experiments in this direction, first tried by me at the Presbyterian Eye and Ear Charity Hospital of Baltimore, and when proved of great value, *from this Institution as a centre*, sent by me through the Medical Journals to all parts of the world, we would not be now receiving news from most distant points, of this old method, made new, for the comfort of both surgeon and patient.

I do not claim the introduction of Adhesive Dressings into Eye Practice, nor the treating of cataract patients in Open Wards, for both were in use 40 years ago, and before I took up the study of medicine. I think that I can claim, however, without fear of contradiction, that I have given such good and satisfactory reasons why this old and discarded treatment should be reaccepted *that I have actually made it new*. Also that I have induced a great many ophthalmic surgeons to follow my example and abandon compresses, bandages and dark rooms, to the comfort and benefit of their cataract patients. Also, that from the Presbyterian Eye and Ear Charity Hospital of Baltimore, *as a centre*, this good work has radiated, certainly not from St. Louis, nor from New York.

Yours Respectfully,

J. J. CHISOLM, M.D.
114 W. Franklin St.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, MAY 14, 1887.

Editorial.

THE MODERN TREATMENT OF URETHRITIS.—There are few diseases which possess a greater interest to the general practitioner, especially if he be a recent graduate, than urethritis. The successful management of this affection, whether specific or non-specific, acute or chronic, has been the means of introducing more than one young practitioner to a remunerative clientèle. Gonorrhœal recipes are regarded as valuable keepsakes by a large and appreciative class of patients. How many young practitioners are there who fail to post themselves in the literature and lore of this subject? Nor does the interest depart with youth. It is instructive to know that the modern treatment of urethritis has been greatly simplified, that the time-honored specific, the faithful talisman of the pocket book is destined soon to give place to the germicide and to the hot water irrigator. The facts which we present will doubtless be hailed with interest by more than one of our many readers. The "Modern Treatment of Urethritis" is the title of a very carefully prepared paper read before the New York Dermatological Society (March 22nd, 1887,) (*Journal of Cutaneous and Genito-Urinary Diseases*, May, 1887,) by Dr. Geo. E. Brewer, of Roosevelt Hospital. Dr. Brewer first draws a distinction between specific and non-specific urethritis, and then proceeds to discuss the treatment of urethritis in its broad sense, including all the varieties of urethral inflammation. He holds that there are at least two varieties of acute urethritis, that one is characterized by a relatively long period of incubation, severe inflammatory symptoms, redness and œdema of the meatus, marked dysuria and profuse purulent discharge, which, under ordinary treatment, continues for from four to six weeks and often longer; that the other has often a relatively short period of incubation, mild inflammatory symptoms, moderate purulent or muco-purulent discharge, and which disappears often without any treatment within two weeks; that these varieties can be distinguished, often by their symptoms, always by a careful microscopical examination of the discharge. In estimating the value of any method of treatment the above distinction should be recognized. The methods of treatment designated as modern, and discussed by Dr. Brewer, consist, first, in the employment of irrigation with bi-chloride of mercury and, second, in the retrojection of hot water. These methods are based upon the view of the probable bacterial origin of this disease. The first attempt at continuous irrigation of the urethra was made by Morgan in 1862, but it was not until 1883 that any attempt at thorough and continuous irrigation of the urethra was successfully carried out. In that year Dr. Holbrook Curtis published his observations and experiments in the treatment of acute urethritis by the prolonged retrojection of hot water. About the same time Dr. W. S. Halstead adopted a method of continuous irrigation with bichloride of mercury. Dr. Brewer's work has been conducted upon these two lines. His investigations have been made during the past six months at the out-patient department of Roosevelt Hospital. The number of cases treated was 212, of which 139 were acute and 73 chronic. Of the acute 88 were classed as specific and 41 as non-specific or doubtful. Of the chronic 44 were classed as purulent urethritis and 29 as gleet.

Seventy-seven cases were treated by irrigation with bichloride of mercury, 46 by hot water retrojection; the La

Fayette mixture was employed in 11, while 7 received no treatment, but were kept under observation. In all cases where the duration of the disease had been under twenty-eight days the disease was classed acute. The results of treatment are shown in tables which accompany Dr. Brewer's paper. They may be briefly stated as fallows: Of 23 cases of acute specific urethritis treated by irrigation with bichloride of mercury marked improvement was noted on the first and latest on the eighth day. The average cessation of purulent discharge was in $10\frac{9}{10}$ days, and all discharge in $17\frac{1}{3}$ days. Of 14 cases of non-specific urethritis marked improvement was earliest on the first, and latest on the eleventh day. The averages in this class were: improvement $3\frac{1}{14}$ days; absence of pus $6\frac{1}{4}$ days; absence of all discharge $7\frac{3}{4}$ days. Of the 8 cases of chronic purulent urethritis treated, marked improvement in 7 was noted at end of first 24 hours and in the remaining case at end of three days, all discharge in $9\frac{2}{3}$ days. In private practice the results are even more favorable. In 30 cases collected, all of acute gonorrhœal urethritis, the recovery in all took place within two weeks. The average was $7\frac{27}{38}$ days.

In 46 cases treated by the prolonged retrojection of hot water alone, or combined with some astringent agent, marked abatement of inflammatory symptoms, a diminution in the amount of discharge, and a decided change in its character were observed. This method is deemed sufficient to check the discharge in cases of non-specific and chronic urethritis within a few days.

Dr. Brewer's experience induces him to assert that in the retrojection of a hot solution of bichloride of mercury we have a method which combines the soothing and antiphlogistic action of heat with the germicidal and curative effect of the bichloride, which in cases of acute specific urethritis, fulfills the indications in a more satisfactory manner than any method with which he is familiar

The method of irrigation is thus explained. The apparatus consists of an elevated reservoir, a rubber tube, and a glass or gutta-percha nozzle. The patient is first instructed to pass his water, the nozzle of the irrigator is next firmly pressed against the urethral orifice. The current is so directed that the stream enters in the line of the canal. Sufficient outflow is permitted to keep the fluid in motion while the urethra remains distended. From one to two quarts of fluid are allowed to pass through the urethra at each irrigation, which should be repeated twice or three times in twenty four hours.

The strength of the bichloride solution used should range from 1 to 60,000, to 1 to 10,000, according to the sensitiveness of the urethra. When hot water is used, the temperature should be 98° at the beginning and gradually raised until it is as hot as the patient can bear; about two quarts should be used at least twice a day.

In concluding his paper Dr. Brewer offers the following summary.

"1st. That in un-complicated cases of acute gonorrhœal urethritis, treated by prolonged and frequent irrigation with bichloride of mercury, recovery may be expected within two weeks; that this period may be considerably shortened by the early inauguration of treatment, by absolute rest, and by the avoidance of stimulants; that it may be indefinitely prolonged by irregularity in treatment, by inordinate physical exertion, and by indulgence in alcoholic and venereal excesses.

2nd. That the retrojection of a hot solution of bichloride possesses all the advantages of the former procedure, and in addition causes a more rapid subsidence of inflammatory symptoms, a greater feeling of comfort to the patient, and is attended with less annoyance and trouble.

3rd. That in cases of acute non-specific urethritis, the favorable influence of these methods is strikingly apparent.

4th. That in cases of chronic purulent urethritis, no agent produces such rapid and permanent improvement as irrigation, especially when combined with astringents and heat.

5th. That the percentage of complications occurring in cases treated by these methods is far below that observed when the ordinary methods are employed."

Medical Items.

The American Medical Association will meet in Chicago on June 7th, 8th, 9th, and 10th.

Nashville has a new medical journal called the *Nashville Medical News*. It is issued semi-monthly and is edited by Drs. John W. McAllister and Richard Douglas.

Antithermin is the latest introduced antipyretic agent. It is allied in its chemistry to antipyrin; phenylhydrazinlevulinic acid is the chemical name.

Privy Councillor Olshausen, of Halle, has accepted the invitation to fill the late Professor Schröder's chair of Midwifery, and commenced his lectures on May 1st.

The West Virginia State Medical Society will hold its twentieth annual session at White Sulphur Springs, W. Va., July 13, 14, and 15, 1887. The Secretary is J. L. Fullerton, M.D., of Charleston, W. Va.

According to Spanish journals there is at present in Logrono a medical man, Don Rosendo Recondo, still in considerable practice and in the enjoyment of good health, who, last February, attained 100 years of age.

Dr. Alfred Meadows, the well-known obstetrician to St. Mary's Hospital, London, died suddenly on April 19, in the fifty-fifth year of his age. Dr. Meadows was well-known in this country as the author of a very popular "Manual of Midwifery."

Drs. D. G. Brinton and Joseph F. Edwards, have severed their editorial connections with the *Medical and Surgical Reporter*. This journal will be edited by Drs. N. A. Randolph and Charles W. Dulles, both of whom are well and favorable known to the profession.

It is reported that proceedings are about to be instituted in Germany against a number of persons styling themselves "doctors" on the strength of didlomas purchased from America *in absentia*. In Berlin alone there are said to be 3,400 of these "doctors," of medicine, philosophy, or law.

Dr. Oliver Wendell Holmes says that he began his professional career in the shop now occupied by the druggist Metcalf. Across the street was an undertaker. He wrote prescriptions, Mr. Metcalf filled them, and the sexton across the street was ready to contribute towards finishing up the affair.—*Ex.*

The Association of Genito-Urinary Surgeons will hold its first annual meeting at Lakewood, New Jersey, May 17 and 18. An interesting programme has been issued. Dr. E. L. Keyes, of New York, is Temporary Chairman, and Dr. R. W. Taylor, of New York, Temporary Secretary.

Dr. Henry Leffman, of Philadelphia, requests those who have made use of gaseous enemata in the treatment of consumption, to communicate the result to him, giving the formula used and adding any special information that may be useful. Dr. Leffman proposes publishing a paper on the subject in the "Polyclinic."

It is stated on the authority of Dr. Grawitz, an assistant of Dr. Virchow's, that in as many as one-third of the cases of so-called muscular rheumatism which have been examined post-mortem, the presence of *trichina spiralis* has been demonstrated. In many of these cases the parasites must have been present in the muscles for many years.

Prof. Da Costa considers the iodide of potassium the only remedy deserving of confidence in the treatment of internal aneurism. He gives gr. xx., *ter die*, increased to the point of tolerance. In addition, he keeps the action of the heart subdued by aconite; for pain, ice over the tumor, and rubbed with an ointment of aconite, gr. j. to vaseline, ℥ j. A quiet life, rest in bed and a dry diet are enjoined upon the patient.

From data furnished by over 6,000 cases in a table prepared by Ansell, and from similar results in other tables, Dr. J. Matthews Duncan concludes that married women, delaying the commencement of fertility beyond six months, are already exhibiting a degree of relative sterility; and that when a married woman remains until the end of the fourth year without conceiving, the probabilities are that she will prove absolutely sterile.

The *Therapeutic Gazette* calls attention to massage as an employment especially suited to the capabilities of the blind, in whom the tactile sense is so strongly developed, and remarks that, in Japan, massage has been for a long period of time practised by blind men, who go about the streets with a flageolet, to call attention to themselves and their occupation. It adds the hint that superintendents of blind asylums will do well to consider this as a possible avenue for labor for their pupils. *Bost. Med. and Surg. Journal.*

A bill passed the Senate of Rhode Island last week, providing that every person, firm or corporation employing minors under sixteen years of age, or women, in any manufacturing, mechanical or mercantile establishment in this State, shall provide suitable seats for the use of such minors and women so employed, and shall permit the use of such seats by such employees when they are not necessarily engaged in the active duties for which they are employed. Every person, firm or corporation who wilfully violates any of the provisions of the law shall be fined not exceeding $20 for each offence.—*Boston Medical and Surgical Journal.*

Original Articles.

REVIEW OF SOME RECENT LITERATURE ON CHLOROFORM AND ETHER.

BY HIRAM WOODS, M.D.,

Assistant Surgeon in Presbyterian Eye, Ear and Throat Charity Hospital.

(*Continued from last issue.*)

The remarks made by Dr. Sayre in the discussion of Dr. Gerster's paper should be carefully considered. He allows his patient to inhale only air which has passed through chloroform. He produces narcosis by giving from 15 to 30 drops. While I am unfamiliar with the inhaler used by Dr. Sayre, there has been in constant use at the Presbyterian Eye Hospital for some months an inhaler constructed on the same principle. All inspired air passes through a small sponge moistened with chloroform. I have seen chloroform used almost daily at the hospital for the past five years by the old towel-cone method. The first time that I used this inhaler, I was surprised to find my patient narcotized by about 20 drops of chloroform. Has this method any advantages over the old plan, or is it more dangerous? I have already given Dr. Sayre's opinion that it is safer because more chloroform must be given by the old method to produce anæsthesia, and there is more danger of the patient's system becoming saturated with it. I can hardly think that Dr. Sayre means to say that by the old plan a patient can inhale one atmosphere of pure air and another of chloroform. The inspired atmosphere is a *chloroform* atmosphere of greater or less saturation. There are several factors which will determine the degree of chloroform saturation. The most important are the amount of chloroform poured on the towel-cone, the distance it is held from the patient's face, and whether the anæsthetizer moves it about or keeps it still. Chloroform vapor has a greater specific gravity than air; consequently it displaces air downwards. The farther it is held above the patient's face the more air it must displace, and hence, the more of its own antidote will it meet before it is inhaled. Hence it will be weaker when inhaled and have less physiological effect. The same course of reasoning will apply to moving it about and bringing it into contact with a greater amount of air, and to the amount poured on the towel. Rarely less than ℥ii to ℥ss of chloroform are poured on the towel. If this is held *still* an inch or so from the patient's nose and mouth, it is easily seen how he may be compelled to breath an atmosphere which is almost pure chloroform and so the system may become, as Dr. Sayre says, saturated with the anæsthetic. I do not, however, believe there is as great danger of saturating the system by the old method as Dr. Sayre implies. If the towel-cone is held at a proper distance (four to six inches) from the face and moved to and fro, undoubtedly more chloroform is *used* in producing narcosis. The excess has little, if any physiological effect. Air is its antidote, and it is the admixture with air which necessitates the extra amount of chloroform. The chloroform vapor must be absorbed before it affects *any* physiological function, and the air antagonizes it *before* it is absorbed. Hence, its action is modified all along the line, and if the large amount of air postpones narcosis, it must also lessen the influence of chloroform on the rest of the system. The advantage of the inhaler lies in the *certainty* which it gives as to distance and dose. Even a careful man may occasionally hold his towel-cone with its ℥ii of chloroform very near the patient's nose, and force him to breath an atmosphere which can kill him. The danger of this is reduced to the minimum by the inhaler. We have seen that by *any* method of inhalation it is only a question of the degree of chloroform *saturation*. A definite amount (15 drops) poured on a sponge through which the same quantity of air passes at all times, gives the patient a *fixed* and *definite dose*, which can be repeated or not, according to the effect it may have. "If," as Dr. Sayre says, "any peculiar disposition or some other

unknown cause" interferes with heart action, this small amount may easily be eliminated, and we have not given an unknown overdose.

A word may be said about the value of statistics. Dr. Wier based his defence of ether largely on the statistical argument. Dr. Gerster, on the other hand, would not admit its value because it is impossible to get all the facts. He knew of *five* ether deaths in one hospital which had never been reported. As to the contradictory evidence of statics, there was a good example at the very meeting of the New York Academy at which Dr. Gerster's paper was read. Dr. Wier reported 1 death in 2,158 cases in defense of ether. Dr. Knapp, also in defense of ether, reported from his own practice 3,000 cases of chloroform anæsthesia and no accident. In Ashhurst's Surgery, Prof. Chisolm is quoted as having collected, up to 1877, 250,000 chloroform cases with 12 deaths, or 1 in 20,834. From other sources the average is put to be nearly one death in 23,000 from ether, and one in 28,00 from chloroform. This latter is generally supposed to be near the truth. Part of the bad showing for chloroform is to be explained by the diligent search which is made for chloroform deaths, the readiness with which the blame is put on chloroform, and the equally great reluctance to blame ether if anything else can be found as a scapegoat. Again, many deaths are unquestionably due to faulty administration. But this of itself is something of an argument for ether. It takes *time* to get *experience*, and comparatively few *young* men have a chance to get instruction in a hospital where chloroform is habitually used. Hence an anæsthetic which is "not so inexorably followed by disaster" if badly given, or improperly selected is to be preferred for general use.

In estimating the value of statistics doubt is sometimes thrown on the cases furnished by the eye-surgeon on the ground that he does not have to use much chloroform in his operations. If the *Medical News* is correct in its interpretation of Dr. Knapp's "primary anæsthesia," (*i. e.*, "before profound narcosis,") his remarks would seem to give support to this assertion. I think, however, that Dr. Knapp means the *first profound* narcosis which is induced. In other words, that he has seldom to renew the anæsthesia on account of his patient waking up. It is a common thing to see the arms drop to the sides, and *apparently* total relaxation, while the slightest touch of the cornea will be followed by spasmodic closure of the lids. With the exception of the rectum and female genital organs, operations on the eye probably require deeper anæsthesia than those on any other part of the body. The chloroform deaths which are absolutely unavoidable are those which come from heart failure. These usually occur *early in the anæsthesia;* either during the stage of muscular rigidity or at the first appearance of relaxation. The eye-surgeon is as apt to have these as any one. He does not, however, run the risks of prolonged anæsthesia which the general surgeon does. These risks I honestly believe depend, as a rule, more on the anæsthetizer than on the anæsthetic. Even if ether be used, its primary effect of stimulation soon gives way to its secondary effect of sedation as the *dose* is increased, and it has to be given with extreme care. The deaths in *prolonged anæsthesia* do not generally occur *suddenly*, but slowly from embarrassment of the respiration and gradual failure of the heart. Important factors which must determine the result in such cases of collapse are the ability of the anæsthetizer to detect the first and slightest signs of danger, and the character and promptness of the means which are used for resuscitation.

In conclusion a few words may not be inadmissible on the preparation of the patient for anæsthesia and the treatment of collapse. We have seen that with both ether and chloroform there is danger of sudden death from heart paralysis. To sustain the heart over the period of anæsthetic depression is the problem. The oldest and most common practice is to give from ʒ ss to ʒ ji of whiskey twenty minutes to half an hour before anæsthetization. Objection

has been made that the secondary effects of alcohol are depressing. Unless the operation be a very long one this is hardly a strong argument against its use, because the anæsthetic is administered during the stage of stimulation. More forcible objections are, (1) that the whiskey is given by the stomach and may produce vomiting if it is not all absorbed, and (2) that it may not be absorbed rapidly enough to have effect. To overcome these, we want something which will stimulate the heart and yet will not have to enter the stomach. Such an agent many surgeons think is found in morphia. Its primary effect in small doses subcutaneously is to stimulate the heart. Then again its sedative secondary action helps the anæsthetic, of which a smaller quantity has to be given and largely prevents the vomiting and suffering which is incidental upon the recovery from an anæsthetic. To the morphia (gr. $\frac{1}{12}$ to $\frac{1}{4}$) a small amount ($\frac{1}{180}$ gr. to $\frac{1}{90}$) of atropia is added. An editorial in the *Medical News*, Vol. XLII, No. 12, explains the use of atropia by quoting the demonstration of Vulpian: "The excitability of the pneumogastric is increased by anæsthetic agents—whence the vomiting and sometimes cardiac arrest. Morphine, while it increases the anæsthetic action does not to any considerable extent lessen the effect on the pneumogastric nerve; but atropine by removing the inhibition exerted by the vagus, removes the most important source of danger." There is abundance of clinical evidence to support the administration of morphine and atropia before the administration of anæsthetics. It seems to accomplish all that alcohol can, and to do more; prolong anæsthesia and lessen the danger of vomiting.

There are only one or two points in reference to collapse to which I would allude. One is that the best evidences of approaching trouble are to be gotten from the condition of the respiration, the action of the pupil and the complexion. If the first warning comes through the pulse the trouble is usually one for which we can do little or nothing. If the heart once stops, it is generally for good. The best and indeed only treatment for heart failure of this kind is the administration of a heart stimulant before anæsthetization is commenced in hopes of preventing collapse altogether. Even then it will sometimes occur although more rarely than if nothing at all is given. I know that there is often a *gradual* weakening of the pulse which portends danger; but this is accompanied by shallow and slow respiration and pallor of the face. These latter usually precede the weakening of the pulse, and should have the anæsthetizer's attention. The least change observed in the complexion or depth and regularity of respiration demand prompt treatment. The same may be said for the condition of the pupil. If it dilates while the patient is inhaling the anæsthetic or during narcosis, means of resuscitation should at once be used.

Promptness in interfering is all important. This was one trouble with the first case narrated by Dr. Packard. After the radial pulse became weak, the operation of perineal section was continued and efforts to resuscitate postponed because some one imagined the pulse in the *posterior tibial artery* was good.*

The reporter of this case also criticises the *suffocating manner* in which a large amount of chloroform was given by a "raw-dresser," and the fact that the man was treated for suffocation by tracheotomy instead of for heart failure. Had he been treated for the latter trouble, he believes "the chances for recovery might have been increased."

Next to *promptness* on the *slightest evidence* of trouble is *position*. The patient should be turned head down. I mention this specially because in some of the reported deaths it was evidently omitted. The head should be kept down during artificial respiration if this latter is necessary. In the chloroform cases at the Eye Hospital during the past six years, I have seen many patients with pallor and bad respiration revive as soon as their heads were lowered. In only two was artificial respiration

Medical Times and Gazette, Oct. 15, 1853.

necessary. One was a boy of 12 and the other a feeble old man of 84, with mitral regurgitation. Prof. Chisolm, whose large experience is known, tells me he has never seen a patient fail to respond if inverted on the first appearance of *pallor* and has never had to resort to artificial respiration. As to hypodermic injections of stimulants, they are, it seems to me, only useful if the circulation is good. But with a fair circulation the above means are generally sufficient. With a very feeble, or no circulation, I doubt if the injections are even absorbed. In some reported cases from collapse from *ether*, I notice that more ether has been injected—probably on the ground of its primary effect being that of a cardiac stimulant. This seems to me to be wrong. Alcohol also is a stimulant; yet no one would inject more whiskey to revive a man who was dead-drunk. The case seems to me to be the same with ether. If it is absorbed at all, it can only add to the collapse. Atropia or ammonia would be the proper remedies, if any would be useful.

In the foregoing I know I have given no facts that are either new or original. From time to time the subject of anæsthesia comes up for discussion among all surgeons. The papers from which I have largely drawn in the preparation of this put this discussion on a new basis. It is now not: "Is one anæsthetic safer than another;" but "what are the clincial indications which are to be our guides in making the selection!" This method of discussing the subject *is* comparitively new.

TREATMENT OF RETAINED PLACENTA, WITH COMPARISON OF CASES.

BY WM. PAWSON CHUNN, M. D.,

Chief of Clinic to the Chair of Diseases of Women and Children, University of Maryland; Assistant Surgeon to the Maryland Woman's Hospital for the Women of Maryland; Member of the Baltimore Gynæcological and Obstetrical Society, etc., etc.

All of us engaged in the practice of the healing art have doubtless many times had occasion to regret that medicine is not an exact science; and that we cannot always in it see the relation of cause and effect. This being necessarily the case in the present imperfect state of knowledge to which even the best of us have only attained, it naturally follows, that the consideration of certain physical signs and vital symptoms in any case may not always lead to the same corresponding diagnosis, and that owing to our want of ability to appreciate the effects of certain remedies our methods of treatment will widely differ.

Many times we say and believe that our cures are the results of our treatment, and very frequently such is the case, but in order to prove this conclusively we must also be able to show that these cures would not have happened unless such treatment had been instituted. This last proposition is sometimes lost sight of entirely, and is always difficult to prove.

First and foremost we do not feel justified in allowing a patient in a critical condition to go without treatment in order to find out what would be the result without the exhibition of the remedy.

On the other hand, many people are affected differently by the same remedy, or by surroundings and circumstances, or last but not least, by the skill of the operator.

But, if we have the same patient, under the same circumstances, attended by the same physician:

1st. With the application of the remedy.

(And in a second similar attack.)

2nd. Without the application of that remedy.

Then by noting the two results in a number of such instances we may reach the truth as near as it may be attained.

Just such an instance occured to me a short time ago, in which the "let alone policy" and the operative plan of treatment were brought into the strongest contrast. The patient herein mentioned suffered two miscarriages at the same month of successive pregnancies, her circumstances were the same in each case, and in both instances she was at-

tended by myself. In the first illness the cervix was dilated and the placenta removed; in the second miscarriage, the placenta was allowed to remain in the uterus.

The following is the full history with the results in each case:

Mrs. T., the mother of one child, eight years old, sent for me about fourteen months ago, saying that although she never had miscarried before, she thought she would meet with that accident in the present pregnancy. Upon examination, she was found to be between three and four months advanced and was suffering intermittent bearing down pains. There was no hæmorrhage however, so an anodyne was given and she was directed to keep quiet in bed. Not apprehending any danger I did not see her again for twenty-four hours afterwards, when I was surprised to find that she had miscarried shortly after my first visit, and that she was still bleeding. She seemed to have some slight after pains. The fœtus was examined and after being duly inspected was found to be quite small. The placenta was *non est*, and careful examination showing no trace of this organ, I decided it was still in the uterus. The woman was immediately lifted out of bed and placed on a table in front of a good light, and the vagina and hands being properly cleansed, an examination was made.

By bimanual palpation, the uterus was found too large and the cervix slightly dilated. The index finger was introduced into the uterus and the placenta found to be adherent. Owing to lack of room it was found impossible to empty the uterus with one finger, and I did not tear the placenta away piecemeal with the curette on account of the hæmorrhage which such a course would inevitably produce. She had already taken ergot. The patient was then put in Sims' position and his speculum being introduced, I inserted a large steel dilator into the cervix and in a few minutes sufficient room was obtained to use a pair of placental forceps effectively. The after-birth was securely seized and safely delivered, with little hæmorrhage. The uterus contracted promptly, the vagina was tamponed, and the patient put to bed without any anæsthetic being used. She went on to an entire and prompt recovery.

Strange to relate, the same patient applied to me only a couple of months ago, under precisely the same circumstances, but unfortunately being located at a distance and only in the city for a few hours I was unable to treat her as I thought proper. She told me, however, that she had miscarried a week before I saw her, just as she had done before, and that she was continuously loosing blood, particularly while moving about. As the placenta had not made its appearance, I naturally decided that it was still in utero and that the hæmorrhage was an evidence of things unseen. Bimanual palpation showed the uterus enlarged and the cervix only very slightly dilated. No operation could be done on account of reasons already stated, and the patient returned home without anything being done. I heard no more of her for some three weeks; at the expiration of that time I was called upon again and repaired at once to the house. In place of the healthy, vigorous woman that had been, there appeared a bloodless, emaciated being, the wreck of her former self and a burden to herself and those connected with her. She had bled almost constantly since I had seen her and was having hectic fever in the evening of each day. She was very weak, with a quick and feeble pulse.

I tamponed the vagina and left her safe, if not comfortable, and returned the next day, when I found the placenta had been delivered without any operation being done. It was decomposing and possessed of an offensive odor. My patient got well from this treatment.

Before concluding this short account, I wish to draw attention to a certain feature of the method of treatment persued in the first illness, viz: the mechanical dilation. Why was this method used and what were its advantages? It seems to me safety and celerity would be the legitimate reply. It is certainly safer on account of its celerity and its non-liability to induce septicæmia. In

books on the subject we find it recommended to use sponge tents for the purpose of dilitation to be left *in situ* some twelve to twenty-four hours. Pain almost inevitably results, time is lost to practitioner as well as patient, the risk of peritonitis or septicæmia is greater the longer the tent remains in position, and at the end of twenty-four hours dilitation is obtained that might have been sufficiently accomplished in twenty minutes with a suitable mechanical dilator. Where the uterus is already softened and the cervix relaxed, and only some additional room is required for intra-uterine manipulation, then I say speedy mechanical dilitation seems to me to be the best method at our disposal.

This practice, so far as I am aware, was first mentioned to the profession of this city by Dr. H. P. C. Wilson, some five years ago, and about the same time I published a series of five cases where the method was tried and found satisfactory. Dr. Wilson afterwards had special dilators of large size made for the purpose, which accomplished the end in view with ease and dispatch. An oculist will enucleate a damaged eye merely for the purpose of avoiding a possible danger to the good eye, or the surgeon advises extirpation of a simple lump on the female breast to escape the possibility of cancer, both of these infirmities being among the remote possibilities. A retained placenta however, although a much more serious affair than either of the above mentioned examples, is many times allowed to remain without any treatment whatever. In such cases I would recommend immediate removal of the placenta, even though some sort of mechanical dilitation is found necessary. No one will affirm that the retention of the placenta can by any possible chance do any good, and it is beyond dispute that its retention may be the cause of great harm, and this to my mind is sufficient reason for the treatment advanced in this paper.

About one-eighth of the Provincial Legislature of Canada is said to consist of physicians.

EAR-TRUMPETS.*

BY C. H. BURNETT, M.D., OF PHILADELPHIA.

There are three reasons why the deaf should use ear-trumpets:

1. In order to aid the hearing.
2. To improve the hearing.
3. For the convenience and comfort of those conversing with the very deaf.

1. When a person becomes very deaf in both ears, some resort to an artificial aid of hearing must be made. So long as one ear remains fairly good, patients will not use an ear-trumpet for the deaf ear. But when ordinary tones near the ears are heard either very imperfectly, or not at all, the sufferer gladly resorts to some form of ear trumpet.

Most of these are unpleasant and imperfect aids, from their disagreeable resonance, and poor conducting powers. They also bruise the meatus, in most cases being made with an ear-piece which fits into the mouth of the auditory canal. These discomforts and imperfections, in the average ear-trumpet of all forms heretofore invented, added to the natural indisposition to employ an ear-trumpet because of its conspicuousness, have in most cases led to an early abandonment, or a partial use at least, of such an instrument.

The cause of ordinary deafness is, in most cases, a catarrhal thickening of the mucous membrane over the ossicles and the inner surface of the membrana tympani, leading to more or less ankylosis in these parts. Passive motion overcomes in them, to a greater or less extent, the immobility induced by this sclerotic process, as it does elsewhere in the osseous and muscular system. The form of passive motion which acts most naturally on the ossicula auditus and their joints, is sound.

If, therefore, sound-waves are concentrated in more than usual quantity or vigor upon the stiffened membrana and the ossicles, as by means of an ear-trumpet, hearing is induced, if the auditory nerve is unimpaired. If the latter

---

*Read before the Philadelphia County Medical Society, April 27, 1887.

is impaired, no form of ear-trumpet will be of use.

2. Not only does such a form of passive motion give immediate relief to the deafness in most cases, but such a form of passive motion, acting frequently and systematically upon the ear, prevents further ankylosis in the conductors, and fatty degeneration of the auditory nerve from desuetude. This, of course, tends to a permanent improvement of the hearing, and, in some instances, patients come to hear at last without a trumpet.

If such a force were brought to bear early in cases of deafness from ankylosis in the ossicula, the defects in hearing could, in most cases, be arrested, and, to some extent, removed. This form of aid to hearing has its happiest results in very deaf children, in whom the loss of hearing often entails loss of speech, if they have already learned it. If they have not learned to talk, and their deafness depends on catarrhal disease in the middle ear, and not on a lesion of the acoustic nerve, the use of a good ear-trumpet will rescue them from entire deaf-dumbness.

3. The convenience and comfort of those who communicate with the deaf by means of a trumpet are not the prime, though important considerations. For, if this mode of conversation is rendered difficult by reason of the imperfect ear-trumpet at command, it will not be readily or willingly employed, and, in the case of children, therefore, not enough will be said to them to improve their hearing or to teach them speech.

The most useful ear-trumpets yet presented to my notice are those of Mr. Maloney, who exhibits them here to-night. They are not only useful as conductors of sound, succeeding where other forms fail, but they do not fit into the meatus. They are held to the ear, the aural end of the instrument being supplied with a disk, and not a tip for the meatus. This does away with bruising the canal, or exciting furuncles in it, so common in the employment of the forms heretofore in use.

They have been devised in a scientific manner, and introduced to the profession on their own merit. The best results, or the most signal ones, have been obtained by the so-called silent instrument. This is simply because it is the most powerful, and hence renders most aid to the very deaf, the only people who are really willing to use any instrument. The smaller instruments are just as good for those not very deaf, and, if used by such patients, would aid in the retention of hearing, and tend to cure their hardness of hearing, as I have shown. But the less afflicted class seem unwilling to use any form of ear-trumpet. All ear-trumpets of any value must possess some size in order to contain a column of air sufficient to impress the drum. They must be larger than the auricle with which the patient is already supplied. Hence, all invisible appliances, so called, are self-evidently good for nothing.

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

REGULAR MEETING HELD APRIL 27, 1887.

The President, H. Augustus Wilson, M.D., in the chair.

Dr. Charles H. Burnett read a paper on

EAR-TRUMPETS.*

DISCUSSION.

Mr. J. A. Maloney, of Washington, was introduced and said:

Mr. Chairman and Gentlemen: I have been requested to lay before you this evening the results of my investigations in "Aural Mechanics," together with the instrumentalities employed by me for the relief and training of the deaf.

My attention was called to this field some years since, while conversing with a deaf friend; after leaving him, this query presented itself to my mind: Why is it that no one stands in the same relation to the deaf as the optician does to those with defective sight? I con-

*See page 46.

cluded that the field was a wide one. I took up first the study of the anatomy and physiology of the ear. I then commenced my labors in "Aural Mechanics," with a mode of procedure as follows:

1st. To develop instruments as far as I could to meet the various phases of defective audition.

2d. To construct the instruments to give satisfactory results without entering the auditory canal.

3d. To use artificial drums or membranes to guard against impact of air upon the "membrana tympani," and prevent reverberation, so common in all the old forms of instruments. I decided that a scientific instrument should possess these three essential qualities: it should be large enough to be of practical value; it should augment sounds: but with such augmentation the "timbre" or quality of sound should be preserved.

We are all aware that the membrana tympani, unlike other stretched membranes, responds to all vibratory motions within a certain limit, whether they are in the form of noise or of composite tones, transmitting through the intermediate agencies of the middle and inner ear, to the nerve of hearing auditory sensations.

Could a stretched membrane be arranged, so closely imitating in function the one given to man, as to show how beautiful are the harmonies of nature?

After experimenting twelve months, I adopted the form of membrane which I will present to your notice. The reason for its adoption came about in this way. In the early stage of my experiments I invariably found a lack of clearness of tone, until one day the thought occurred to me that I could secure uniformity of tension by clamping the membrane between two rings. When this was done, I found it a great improvement over all other methods, and consequently adopted it after thorough tests.

Even after obtaining good results, I could not but feel that there must be other results produced by the rings than that of maintaining a uniform tension of the membrane. I found that while the membrane was upon the stretcher-frame, with the rings glued upon each side of the membrane, like any other membrane, it would be thrown into sympathetic vibrations by tones corresponding to its fundamental; *but that when cut from the frame*, and dependent for its tension upon the two rings alone, it would not respond to a tone corresponding to its fundamental. Now it has been thought that the last named feature exhibited by the membrana typani was produced by its union with the auditory ossicles. But may it not be due to two facts?

1st. That the margin is thickened.

2d. That the middle layer, or "substantia propria," is fixed to a ring of bone.

You will observe that my membrane describes a central vertical line between the two rings acting as clamps, and that the rings themselves represent the ring of bone to which the middle layer, or "substantia propria," of the membrana tympani is attached.

In the construction of the instrument, the fact must be borne in mind that it must be arranged to suit and compensate for the defect of hearing.

1st. Arrange for high tones, if the defect is in that direction; or for low tones, if the defect is in that direction.

The augmentation and clearness must be to the extent that the person will hear every word spoken, instead of a word here and there, as heretofore, which involves a severe mental strain to construct the incomplete sentences.

[The following forms of instruments were then exhibited and described:

No. 1, for low and medium sounds.

No. 2, for high sounds.

These cover ordinary, and some special cases.

No. 3, "Silent," used in training and in some cases constantly.

No. 4, a modification of No. 1, to be kept in position by its bearings on the concha, tragus, and antitragus.]

Dr. S. S. Cohen said: I had the pleasure of seeing some time ago a demonstration of these instruments in the case of some patients of Dr. J. Solis Cohen, and they acted very satisfactorily. A letter was received some time ago from Dr. Lacharriere, of Paris,

the eminent physician in charge of the National Institution for Deaf Mutes, inquiring as to the truth of reports that in certain institutions in this country, especially in New York, ear trumpets were being used in the instruction of so-called deaf-mutes and that it had been found that a gratifying proportion of children thought to be totally deaf, reacquired a certain degree of hearing power. After some correspondence we learned that Mr. Currier, Professor of Articulation in the Deaf-Mute Institution at Washington Heights, New York, had used an instrument different in construction from that of Mr. Maloney, with good results. I have here two contributions which he has published, one in the *Annals of the Deaf and Dumb* for January and for October, 1885. He reports a number of cases that have acquired the power to carry on conversation. Mr. Currier uses what is termed the "conical conversation tube," attaching two mouthpieces and tubes to a single earpiece, in order that the patient may hear his own voice as well as that of the instructor. His system of instruction to reawaken so-called "latent hearing" is ingenious and from his reported cases, apparently quite successful. If Mr. Maloney's earpiece were attached to Mr. Currier's double tube it might be found still better.

Dr. C. Wirgmann asked, is there any liability for the rubber disk to get out of order?

Mr. Maloney said: With reference to the durability of the rubber, I would say that it has a protective coating. During the past nine months I have exposed them to varying changes of temperture without any apparent effect. If the membrane should get out of order it can easily be replaced.

I have never had my attention called to the instrument of Mr. Currier until the matter was mentioned by Dr. Cohen this evening. I find that his instrument is open at both ends. In speaking of what I term No. 3, or "silent" instrument, I neglected to state that it is closed at the end nearest the ear. The intention of this is to prevent the impact of the air on the drum of the ear. Such impact has a tendency to destroy the clearness of the tone. With my instrument the only impact on the "membrana tympani" is that of the column of air in the auditory canal between the membrane of the instrument and the drum of the ear, thereby developing *true auditory sensations* which cannot be produced by instruments open at both ends.

While I have done something in the way of testing those supposed to be entirely deaf, I am not prepared, without my notes to speak on this subject, because I have not yet finished the line of tests. I can say, however, that I have made tests in two cases supposed to be totally deaf and dumb. One was a man forty-two years of age, and deaf from childhood. I made him hear on both sides, *noise only*, for the percipient functions had never (as in such cases) been trained or educated.

The other was a boy, eleven years of age, supposed to hear very slightly on one side only. Upon making tests I found he could hear on both sides, *noise only*, for the same reason as mentioned in the foregoing case.

When I complete the line of tests marked out I shall be glad to present the results to this Society, if it is their pleasure to hear them. I thank you, Mr. President and gentlemen, for your invitation and attention, and for the honor you have conferred upon me.

Dr. C. H. Burnett said: The question of so-called latent hearing in deaf-mutes, is of course important. In one sense, there is no such thing as latent hearing. Without doubt, many deaf children lose the power of talking if they have previously acquired it, or fail to learn to speak on account of their inability to hear. In the case of a graduate of two deaf-mute colleges, the man's wife discovered that he could hear to a certain extent, and by systematically talking to him, he acquired the power of hearing an ordinary tone of voice while in an adjoining room. This case was reported to me by Mr. Graham Bell, of Washington. In most cases, deafness is due to ankylosis, and the use of an ear-trumpet is simply another application of the movement cure.

I have myself seen a child a little over two years of age, just learning to talk, lose its hearing to a marked degree. By persistent teaching on the part of the mother the hearing was much improved, and the child was rescued from a condition of deaf-dumbness. The child is now twelve or thirteen years old, and while the hearing is not perfect, she is far from being a deaf-mute. Many deaf-mutes can hear something. It is very onerous for even a parent to exercise the hearing by the unaided voice, but with an instrument, like those of Mr. Maloney's, the parent may be induced to undertake the task.

AMERICAN SURGICAL ASSOCIATION.

(Specially Reported for the Maryland Medical Journal.)

Annual Session of 1887.

The annual meeting of the American Surgical Association was held in the reading room of the Army Medical Museum, Washington, D. C.,

may 11, 12, 13, and 14, 1887.

First Day.—Morning Session.

The Association was called to order at 11 A. M., by the President, Dr. Hunter McGuire, of Richmond Va.

PRESIDENT'S ADDRESS.

THE NEED AND VALUE OF CO-OPERATIVE WORK IN SURGERY.

To preside over a body of men each one of whom is daily, almost hourly, doing something to lessen human suffering and to add to the life and comfort of his fellow men, is indeed a proud distinction. I shall venture to occupy your time briefly, not with a discussion of some subject, for the programme shows how rich the supply of material will be in this direction, but with some remarks concerning the need and value of co-operative work in our profession, and afterwards in suggesting some changes in the management of the meetings of this Association. Nearly every advance in whatever is accomplished by human enterprise is secured by co-operative effort. Every department of life is full of illustrations of the power of association in the accomplishment of great purposes while the illustrations are almost as numerous of the failure of individuals to attain those ends because they work alone. (Many illustrations of the beneficial results of co-operation in other departments of labor were cited from history). Advance in surgery can be more surely made by Associations such as ours than by any individual efforts of man. The day has passed when the dictum of one man, no matter how exalted he may be, is received without question. The difficulties which beset us are numerous. Disease presents problems difficult of solution. We cannot apply to the human machine the fixed rules by which inanimate bodies are governed. The result of the work of the surgeon in private houses and in public hospitals must be different. Besides this it is necessary to get rid of the rubbish with which we are too often flooded by ignorant but ambitious contributors. This is an easy task, but it is more difficult to know when to reject the material presented by skillful but unscrupulous workers who, to gratify their own personal vanity, make false returns of their labors.

I have mentioned only a few of the difficulties by which we are surrounded. Their influence over the true man, the true surgeon, should be to make him more patient, inspire him with more zeal and teach him more plainly the value of co-operative industry. For the developments yet awaiting us we must be indebted to the contributions which every patient and conscientious laborer may bring to the common stock of ascertained knowledge and we shall accomplish this best by the cultivation of a broad and generous appreciation of each other's work from which every particle of envy at the success of others has been eliminated; by the hearty commendation which we give to all who have en-

larged the boundaries of surgical science or who have improved its art.

In concluding his address the President made the following suggestions:

1. The formation of a business committee to prepare the work of the Association. The committee should select two general subjects in surgery to be discussed at the morning sessions of the first and second days.

2. The address of the President should be limited to half an hour, readers of papers to the same length of time and those who take part in the discussion to fifteen minutes.

3. I venture to suggest the abrogation of Article 9 of the Constitution. This will allow us to admit to Fellowship some men in this country who are really needed in the Association. While I believe in the rigid observance of the Code of Ethics of the American Medical Association and the absolute necessity of its enforcement in that body there is no need for it in our Association. The only code that we should have is scientific work.

4. That the report of the committee with reference to the American Congress of Physicians and Surgeons be adopted.

5. That the Constitution be amended that propositions for membership shall lay over for one year. The qualifications for fellowship should be age, experience in surgical work, scientific attainments with general culture.

A committee was then appointed to take into consideration the suggestion offered by the President; the committee consists of Drs. S. W. Gross, C. H. Martin, D. W. Yandell, Moses Gunn and C. Johnston.

The Association then went into Executive Session.

Afternoon Session.

Dr. F. S. Dennis, of New York, read the following paper on

THE EXPLORATION OF THE BLADDER BY THE SUPRA-PUBIC METHOD.

The supra-pubic operation of to-day is practically the same as the old operation; the only improvement has been improvement in technique. A brief historical account of the operation was given; the first reported operation was that of Franco in 1561. From that period to 1879 the operations were not numerous, but from 1879 to the present time the operation has been done with such success as to attract attention throughout the world. The time is not far distant when practically the only two operations will be supra-pubic lithotomy and litholapaxy. Supra-pubic lithotomy is simple in technique, safe in execution, free from injury to the reproductive organ, radical in results, curative in application and brilliant in statistics. The many serious accidents attending the lateral operation are avoided. Technique of operation. For a few days before operation a milk diet should be employed. The day previous to operation the bowels should be moved with castor oil. The morning of the operation an enema should be used so as to empty the rectum for the introduction of the rubber bag. The parts should be washed with antiseptic solution. After the patient has been etherized, the surgeon should introduce a rubber bag into the rectum so as to be above the internal sphincter. Into this twelve ounces of warm water is to be introduced. This quantity will have to be increased or diminished according to circumstances. The danger of rupture of the rectum on elderly people and young boys, should be borne in mind. The urine should be withdrawn and six ounces, more or less, of an antiseptic solution introduced into the bladder. The catheter may be left in the bladder and stopped with a cork and this will serve as a guide to cut upon. The distention of the rectum and bladder increases the distance from the pubes to the anterior cul-de-sac of the peritoneum to three inches. The incision should be made in the median line and should extend for three or four inches above the pubes. When the transversalis facia is reached the use of retractors on the principle of the eye speculum facilitates the operation. Having divided the fascia the end of the catheter can be felt and cut upon as a guide. The bladder

may then be seized with two tenacula and opened. Where free exploration is desired, sutures are introduced on each side of the incision. The stone is removed either with the fingers or forceps. The bladder may then be washed out. A catheter should be introduced through the urethra, but not left longer than 24 hours, on account of the danger of exciting traumatic urethritis. In the majority of cases the wound of the bladder should be left open. In cases of calculi, the condition of the tissues is such that primary union is unlikely. In certain other conditions such as rupture the wound may be closed, for here the condition of tissues is different. The abdominal opening is to be closed and a tube introduced.

This operation is indicated (1) for hard, large calculi, and in persons suffering with paraplegia and deformities rendering lateral lithotomy difficult, (2) for removal of certain foreign bodies such as hair pins, etc., and for the treatment of chronic cystitis, (3) in cases of tight stricture, fibroma of prostate, tumors of the bladder and for rupture. In its extra-ordinary simplicity, its reduced mortality, it freedom from danger and safety for the general practitioner it compares well with litholapaxy.

The speaker had collected 124 cases of supra-pubic operation for stone done since 1879. Previous to this date the rate of mortality was 30 per cent. Since then the mortality has been reduced, there being 18 deaths, a mortality of 14 per cent. Seven of these deaths may be justly excluded, giving a mortality of 9 per cent. According to Sir Henry Thompson's statistics, the death rate from the lateral operation is 12 per cent. According to the same authority the mortality of lithotrity is 6 per cent. In considering the mortality of this operation, two facts are to be considered, the mortality may be improved by more rigid antiseptic precautions. The second fact is that the operation has been limited to the largest stones. When the smaller stones are included the death rate will be reduced. Specimens showing the position of the bladder under various conditions were then shown.

REPORT ON PROGRESS IN DISEASES OF CHILDREN.

BY A. K. BOND, M.D., OF BALTIMORE.

A CASE OF EPILEPSY CURED BY CIRCUMCISION.

In the *Medical and Surgical Reporter*, February 19, 1887, Dr. Sinkler relates a case in which epileptic fits were apparently caused by irritability of the penis, and ceased after the performance of circumcision. The patient a child three and a half years of age, of healthy parentage, had, at the age of twenty-two months, two spasms. During the following month he had no attack, but from this time until he came under the doctor's care (eighteen months in all) he had about once each week an attack of general convulsive movements followed by stupor or sleep. Upon examination the prepuce was found to be elongated, inflamed at the edges, but with an orifice wide enough to allow retraction over the glans. The attendant said that the child frequently handled the penis, and that it seemed to give him discomfort. The slightest touch caused an erection. The The child was intelligent and well-nourished. Bromide of potash in doses of 5 grs. t. i. d. caused a temporary reduction in the number of convulsions, but at the end of a month of this treatment the number had increased to forty a week, and the child seemed to be losing its intelligence. As the penis remained as sensitive as before, circumcision was performed, and the bromide was continued in the same doses for three weeks. During the first week the patient had two convulsions, but after this no recurrence of the attacks. As the child remained under observation for four and a half months after the operation, the doctor feels safe in reporting the disease cured. When last seen the patient was intelligent and in good health.

NARCEINE IN WHOOPING-COUGH.

Dr. Eliot (*Journal of Amer. Med. Association*, Jan. 22, 1887) reports a case in which a male child, whose mother

had contracted whooping-cough five days before his birth, exhibited, when nine days old, symptoms of whooping-cough. Seven days later, after other remedies had failed, Dr. Eliot ordered narceine gr. $\frac{1}{25}$ in syrup of acacia and water, to be repeated three times a day. After the second dose had been given a decrease in the quantity of urine excreted was observed. The dose of narceine was then reduced to gr. $\frac{1}{2}$ (three times a day (?)). Entire suppression of urine resulted, with great drowsiness, refusal to nurse, constipation and great restlessness. As no urine was excreted during twenty-six hours, the administration of narceine was stopped, and small doses of podophyllin were given, with spirits of nitre, while hot poultices were applied to the abdomen. After thirty-two hours suppression the excretion of urine was resumed, the bowels being moved at the same time, and the child recovered gradually from its depressed condition. The whooping-cough was not in the least benefitted, and the child, though treated with simple remedies, was taken with convulsions, and died at the age of thirty days. Although this was not a conclusive test of the drug yet it should be a caution to those who are inclined to follow incautiously the recent recommendations of narceine in whooping-cough,

CASES OF DIPHTHERIA LOCATED CHIEFLY IN THE ALIMENTARY TRACT.

In the *Medical Herald*, January, 1887, Dr. Herbert reports two case of great interest. During the epidemic of diphtheria, he was called to a family in which two girls, one of nine the other of five were taken sick at the same time. The symptoms were elevation of temperature (102° to 104° F.), rapid and very weak pulse, constipation and scanty and dark urine. The throat was externally slightly swollen, internally somewhat red with little or no exudation. Throughout the illness the throat exhibited in the two cases no more severe symptoms than these. The chief interest lies in the *abdominal symptoms*. There was, in each case at the beginning, very severe pain in the stomach and bowels. Both patients seemed to be getting on nicely when, on the ninth day in the case of the younger patient and a day or two later in the case of the elder, discharges from the bowels occurred, consisting of several pints of a watery fluid, thick with pieces of membrane thin and narrow and an inch or less in length. These discharges were repeated at first several times in the day, and shreds of membrane were seen in the stools for eight or ten days following. Soon after the first discharge, in each case, the temperature sank, the pulse improved and appetite returned, even the action of the intestines seeming more natural, and this improvement passed steadily on into convalescence, though the return to complete health was very slow. As the discharge seemed ta be a relief to the system no attempt was made to control them.

Dr. Herbert is convinced that these were cases of diphtheria of the abdominal tract. As only ordinary remedies—iron, quinine, digitalis and small doses of carbolic acid, with enemata, but no purgatives—had been used, and the diet had been chiefly liquid, the discharges could not have been the result of the treatment. That the cases were cases of diphtheria seems clear, from the initial symptoms of the disease, the state of the throat, the fact that the older girl suffered for some time during convalescence with partial loss of speech, and the occurrence during the illness of these patients, of sore throat apparently of a diphtheritic nature in two other children in the family.

Impressed by the unusual nature of the symptoms recorded by Dr. Herbert, I have consulted the treatises of three eminent authors upon the subject. I find in two of these no reference to diphtheritic exudation in the stomach and intestines. In the third (J. Lewis Smith on Diseases of Children) record is made of a post mortem of a child in which the whole stomach nearly was lined with diphtheritic exudation, and of an other case—the only one of diph theritic inflammation of the intestines which he had ever met—in which a

man, in whose family diphtheria had just occurred, was taken with what seemed to be typhoid fever, and passed by rectum a cylinder a foot long of diphtheritic pseudo-membrane, dying eventually from intestinal cicatrization.

MEDICATION IN PHTHISIS.—M. Calman in the *Gazette des Hopitaux*, April 21st.

The therapeutic agents proposed at this time for the relief of phthisis are so numerous that it is almost impossible for practitioners who cannot devote much time to reading to arrive at any definite conclusions as to the results produced by the various methods. I will eliminate all those remedies which are used only to relieve the caugh, or to build up the strength of the patient, and mention only those based upon antiseptic methods, looking to the destruction of the specific bacillus.

The following is the result of my personal experience together with such reports from other sources as I have been able to collect.

Iodoform in capsules or pills has given appreciable results as a gastro-intestinal antiseptic, acting thus by actual contact, but even after a long trial in phthisis the bacilli have not disappeared from the sputum. The general condition was not benefitted and in two cases harm was done by impairing the appetite.

The gaseous enemata have not arrested the progress of the disease, and have failed to relieve the sweats or reduce the temperature. I have observed some intestinal derangement from inflation of the bowels. In some instances a calm sleep was produced from the action of the carbonic acid; while in some cases this method of treatment may be advantageously employed it is palliative merely and not curative.

Aniline in solution, pills or powder, has given results inferior to those obtained by the crude tar from which it is extracted. The sulphite and hyposulphite of soda have for a long time been recognised as possessing a marked influence in certain catarrhal conditions, but they do not even destroy the bacillus even when given in doses which were barely tolerated.

The subcutaneous injection of eucalyptus or its derivatives do not give any better results.

I have used creasote (made from beech wood) for some time, giving my patients four to six capsules at dinner and supper, using in the morning iodoform, tannin, phosphites or sulphites, according to the case. After some days of this treatment the expectoration has diminished, and in several cases the bacilli have entirely disappeared, the fever ceased and the appetite returned.

If instead of confirmed phthisis there has been only a catarrhal condition or a chronic bronchitis, the various forms of which of often give rise to uncertainty in diagnosis, a cure has been the rule. These excellent results are not surprising when one considers that creasote is a happy natural combination of antiseptic and balsamic properties.

PHENYL-HYDRACINE AS A TEST FOR SUGAR IN THE URINE.—Two pinches of hydrochlorate of phenyl-hydracine and four pinches of acetate of soda, are placed in a test-tube, which is afterwards half filled with water and slightly heated. An equal volume of the urine to be tested is then added to the contents of the tube, and the whole placed in a *brin-marie* for twenty minutes, after which it is cooled in cold water. If there be a considerable quantity of sugar in the urine it is thrown down, if the liquid is only slightly turbid the precipitate should be allowed to stand for a few hours, and the crystals should then be examined with the microscope. Von Jaksch has found this test useful in three cases of poisoning by carbonic oxide.—*Brit. Med. Jour.*

REDUCTION OF HERNIA.—After taxis has failed the following has succeeded: Introduce an elastic tube in the rectum as far as it will go, and slowly inject air through it. The intestinal cords will be seen to distend, and after a short time the tumor will suddenly disappear. The tube must not be withdrawn immediately, but the air is allowed to escape through it first.—*St. Louis Med. and Surg. Journal.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, MAY 21, 1887.

Editorial.

SOME RECENT OBSERVATIONS UPON TYPHOID FEVER.—ITS ETIOLOGY.—Probably the experiments that have occupied the most conspicuous places in the more recent investigations upon the subject of typhoid fever, and the conclusions from which have been most influential in directing the many lines of experimental observations upon the etiology of this disease, are those of A. Fränkel and of C. Seitz.

Fränkel was led to conclude from his observations that pathological changes and constitutional symptoms were necessarily the result of the presence of the so-called bacilli at the point or points at which these changes were in progress. While on the other hand, Seitz, from his experiments maintains the opinion that the pathological processes, the necrotic changes in the intestines, etc., were the result of the presence of a poison in the blood and lymph streams. He holds it is a constitutional toxæmia resulting from the dissemination of a peculiar ferment generated by these organisms in their normal physiological function.

With the publication of E. Fränkel and Simmond's observations, and the very convincing proof of the ability of the organism with which they worked, to produce in the lower animals, rabbits and guinea pigs, changes in the intestinal canal that were anatomically and histologically identical with those found in the human intestine after death from typhoid fever, the medical world was about convinced that this malady was demonstrably dependent upon a special organism that had the power, when having gained access to the human system, of producing a disease which is characterized by peculiar symptoms and anatomical changes, and which we recognize as typhoid fever. The results, however, were not universally satifactory and we find (*Zeitschrift für Hggiene*, March 1st, 1887) that they have been critically reviewed by Beumer and Peiper, who, in a very carefully conducted series of experiments, have arrived at results which are interesting in the extreme. As to the mechanical influence of these organisms in the tissues, and the necessity of their presence at the points of pathological change, they have completely eliminated this factor, but with respect to the theory of general toxæmia, as held by Seitz, their results not only confirm his opinion but go further, and decide that these pathological changes result not only from the ferments or poisons generated by the so-called typhoid bacillus, but that other organisms now classified as pathogenic also possess a similar power. And they conclude, moreover, that this poison must be absorbed into the blood and enter the tissues through this medium.

Their experiments were begun by injecting into the stomach (by means of a catheter introduced down the œsophagus) of ten rabbits, different amounts of a fresh culture of typhoid bacilli, the animals having previously fasted and otherwise been prepared for the experiment.

Of these ten rabbits, two died immediately as a result of the operation; of the remaining eight, four had passed into the empty stomach a certain small amount of a fresh culture of the typhoid organisms. After showing only slight signs of a mild degree of indisposition for about two days, they all rallied and on the fourth day were killed. Autopsy revealed no characteristic or marked anatomical changes whatever and it was impossible, by bacteriological methods, to prove the presence of the organisms in the tissues of the body.

The remaining four of the eight rabbits received double the amount of material injected into the stomachs of the first animals. Two died and two were killed, and as in the case of the first four, no anatomical alterations of any significance were present and no organisms could be detected in the tissues. The enlargement of the spleen, mesenteric glands and Peyer's patches which appear as a result of injection through the blood stream was absent.

Similarly (by the introduction of a catheter down the œsophagus into the stomach) were different amounts of typhoid bacilli introduced into the stomachs of guinea pigs, the animals having previously fasted and their stomachs prepared for the operation by being carefully neutralized. On the whole, the result of the experiment upon the guinea pigs was about the same as upon rabbits.

The following table will show the result of the inoculations with different amounts of the organisms. The material inoculated was measured by the number of organisms it was possible to take upon a loop of platinum wire, the loop having a diameter of about 2 or 3 millimeters.

RABBITS.

4 inoculated with 15 loops-full of typhoid bacilli, none died.
4 inoculated with 30 loops-full of typhoid bacilli, 2 died.

GUINEA PIGS.

5 inoculated with 2 loops-full of typhoid bacilli, none died.
5 inoculated with 5 loops-full of typhoid bacilli, 1 died.
5 inoculated with 10 loops-full of typhoid bacilli, 3 died.
5 inoculated with 20 loops-full of typhoid bacilli, 4 died.

Since these animals must have died as a result of the injections, and as it was impossible to demonstrate the presence of organisms in the tissues, death must have resulted from the introduction or rather the absorption into the system from the stomach, of the peculiar poison generated by these microbes. It is also seen that the death-rate is in direct proportion to the amount of material injected, and consequently to the amount of this poison that is introduced into the system.

The conclusions that they have drawn from this observation are in complete harmony with the view held by Seitz, but in no way coincide with that held by A. Fränkel.

It is also easy to see from these experiments that it is not possible for the bacilli to gain access to the system through the healthy mucous membrane of the alimentary canal.

They likewise conclude that in lower animals, at least the rabbit and the guinea pig, that the typhoid bacillus cannot be classed with the infectious organisms, for with infectious organisms, strictly speaking, infection is independent of the amount of material inoculated into the system. They agree with Eberth, who says that many times an outbreak of typhoid fever in a house in which the hygienic regulations are good, can be traced to household pets as a medium of introduction.

Before proceeding further with an account of their investigations they refer to a work done by Sirotinin, who showed by injecting into the blood of lower animals a number of different cultures of saphraphytic organisms (bacil. neopolitanus, b. indicus, b. crassus sputiginus, etc.) that swelling of the spleen and mesentery glands and alterations in the intestines were not characteristic of typhoid injections, but were common to almost all acute infectious diseases as well.

Sirotinin and Seitz injected into the vascular system of animals *sterilized* cultures of typhoid bacilli and got the same results as when living cultures were employed, the number of deaths depending upon the volume of the injection.

From the failure to detect the typhoid bacilli in the tissues of those animals dead from the introduction of the poisonous cultures into their stomachs, it is seen that typhoid fever is not like anthrax and many other mycatic diseases, one in which death results from the increase and multiplication of the organisms in the blood, but rather like Asiatic cholera, a disease in which the seat of growth and physiological function of the organisms is the intestinal track, and from this point is the *ptomaine* or

the poison, of whatever nature it may be, disseminated.

With the object of determining if it is possible to produce an immunity against this typhoid poison, 30 mice were vaccinated with solutions of varying strength, beginning with the smallest, one drop, and going up to a maximal dose that had been proven to be fatal to these animals. The result was, that in the majority of cases it was possible to produce in these animals a complete immunity against the fatal results of large injections, and they therefore hope, after further study, to be in a position to justify them in recommending such a procedure upon the human being.

The conclusions therefore from all this work is that typhoid fever is not a disease dependent upon the presence of the typhoid bacilli in the blood, but rather upon the dissemination through the system of a poison generated by these organisms that have their seat of physiological activity in the intestinal tract, and, moreover, that there are other organisms that have the power of generating poisons which when introduced into the circulation of the lower animals, produce results quite similar to those observed when the typhoid bacillus is introduced.

This knowledge is not with out considerable importance, for if these pathological processes are dependent upon a poison generated by these organisms, the work is by no means completed when looked at only from the standpoint of the bacteriologist. Here remains a field in which the physiological chemist can labor with most profitable results, for, until the true nature of these poisons are known, we are a long way from a complete solution of the problem. And as there are apparently a number of organisms capable of generating ferments having the power to produce like pathological results when introduced into the lower animals, from a hygienic standpoint, it is essential that our surroundings and habitations should be in such a condition as not to be *most* favorable to the development of organisms of any sort. For it is not impossible for them to have some such power respecting the human system.

Miscellany.

Carbolic Acid Inhalations in Whooping-Cough.—In the *Deutsche Med. Wochenschrift*, No. 21, 1886, Dr. R. Pick, of Koblentz, published several cases which seem to show that the inhalation of concentrated carbolic solutions has a powerful curative action in whooping-cough. Dr. Kniaziolucki, of St. Zofia's Hospital in Lvov, in Galicia (*Wiadomosis Lekarskie*, No. 3, 1886, p. 82), accordingly tried the same method in a severe case of his own occurring in a weak, emaciated, febrile girl, aged 9. The affection had lasted for about four weeks, and the paroxysms occurred about twenty eight times a day. The inhalations of carbolic acid, either pure or diluted with an equal amount of distilled water, were repeated hourly, the administration being continued for ten minutes on each occasion. The number of paroxysms during the subsequent days fell to 20, 19, 12, 12, 6 respectively, and from the sixth day of the treatment the patient had not a single attack. The temperature became normal on the third day. After ten days' stay in the hospital the girl was discharged quite well. No poisonous symptoms were observed in this case or in those related by Dr. Pick. Equally satisfactory results were obtained by Dr. W. Jakobski, of Odessa (*Wiadomisis Lekarskie*, No. 9, 1887, p. 280), who used a 50 per cent. solution of the acid, the inhalations being carried out for ten minutes every two hours. In one of his cases the daily number of paroxysms fell rapidly from thirty- two to six. Dr. Jakobski differs from Pick and Kniaziolucki only as regards the details of the method. They principally employ a mask resembling that used for giving chloroform; this is placed over the patient's nose and mouth. Dr. Jakobski, on the other hand, finding that this apparatus frightened children and led them to resist the application, devised an instrument like a toy, consisting of a pasteboard tube with gold paper gummed over it, and fitted with a handle. Within the tube are two thread nets, and between them a layer of Bruns's cottonwool, which is moistened with the

carbolic solution. Jakobski found that with this there was no difficulty in getting the little patients to take the inhalations.—*British Medical Journal*, April 30, 1887.

Wasserfuhr: Should the Healthy Brothers and Sisters of Children who are Sick with the Measles be kept from School? (*Rev. Mens. des Mal. de l'Enf.* [from *Berl. Kl. Woch.*, 1886, No. 19], December, 1886).

The author condemns the legal measure in vogue in Prussia, which excludes children from school as soon as a case of measles appears in the house in which they are living. Among the principal reasons for his opinion are:

1. All school-teachers recognize the disadvantage to children who are thus compelled to absent themselves for several weeks from school duties.

2. It has not yet been demonstrated that measles can be communicated through the medium of healthy individuals. It is therefore illogical to use such severe measures for hypothetical causes.

3. The enforcement of the regulation to the letter is almost impossible, since the responsibility for its infraction rests not with the parents, but with school authorities.

4. The danger to life from measles in children more than five years of age is almost insignificant. If these children escape measles during their childhood, they may be attacked at a later period of life, when they are of greater importance to society, and when the complications of the disease are much more serious.—*Arch. Pediatrics.*

Fatal Results of Intrauterine Medication.—Dr. Otto Engström, of Helsingfors, relates the following case in a Swedish medical journal. A woman, aged thirty-seven, had suffered from persistent metrorrhagia. The uterus was retroflexed, but no signs of past or present inflammation could be discovered. It was replaced and scraped out with a Simon's sharp spoon, two small spoonfuls of hyperplastic tissue being removed. A solution of iodide of potassium at 45° C. was then injected, the relative proportions of iodine, iodide of potassium, and water, being 1, 2, 30. No fever, and scarcely any pain followed. In five days time a second injection was used, the temperature being 40° C., and the relative proportions of iodine, iodide of potassium, and water, 1, 2, 10. No pain was experienced, and the patient walked up and down stairs. On the evening of the second day, however, a rigor came on, followed by pyrexia, abdominal tenderness, diarrhœa, and convulsions, death occurring two days later. At the necropsy there were found broncho-pneumonia, chronic œdema of the lungs, endocarditis, and purulent peritonitis. The substance of the uterus was soft, friable, and gray-colored, containing specks of blood and lymph. The peritoneum over the uterus was of a yellowish-red color, and covered with puriform matter. The Fallopian tubes and their fimbriated extremities were not dilated or particularly reddened, and the mucous membrane presented no abnormality. The os uteri was too small to admit a fine probe. A large quantity of pus occupied the peritoneal cavity. Dr. Engström does not think any of the injection can have passed into the tubes, still less into the peritoneal cavity, and believes that the fatal peritonitis was due to an extension of the inflammation directly from the uterine wall to the peritoneum.—*Lancet*, April 16, 1887.

Infantile Constipation.—A very successful remedy for this is podophyllin, in small doses; iridin may be combined with good effect. Make a tincture of the following: Podophyll. resin, gr. viij.; iridin, gr. v.; spt. ammon. arom., ʒj. Digest for several days, and filter. From one to two drops of this may be given at bedtime on a small piece of loaf-sugar, or the dose may be combined in mixture along with syrup of orange. This is the dose for a child of one year and under.—*Med. Record.*

Dr. D. G. Brinton, who has been for a number of years editor and publisher of the *Medical and Surgical Reporter* and the *Quartely Compendium of*

Medical Science, informs his many professional friends, and the medical public in general, that he severed his connection with those journals on the 1st of May, 1887. He felt obliged to take this step by the opposition of the parties who own those journals to certain changes in the *Reporter*, which Dr. Brinton considered necessary improvements and justly due in a five-dollar journal to subscribers and advertisers. The requisite authority to make these having been refused, he could not conscientiously continue to publish it at that price.

It is not his intention to retire from the arena of medical journalism; on the contrary, he hopes in the early autumn to announce his connection with a journal which will fully meet the legitimate demands of the medical public of the day.

Simon, J.: Treatment of Convulsions in Children. (*La Concourse Méd.*, December 18, 1886).

The most frequent cause of convulsions in children under two years of age is indigestion, in cases in which the convulsions are not accompanied by fever. If one is called to such a case an opening injection should be given, and an emetic of the syrup of ipecac combined with the powder of ipecac as soon as the jaws are sufficiently relaxed to admit of its being taken by the mouth. Should the convulsions continue there is no need of exciting the action of the skin with vesicants and sinapisms. Instead, a few whiffs of ether may be inhaled, and then the following potion may be prescribed:

℞ Potassæ brom., 4 grammes;
Moschi, .20 gramme;
Linden hydrolate,
Florum aurantii, āā 50 grammes;
Syr. sim., 20 grammes.
Sig.—A coffeespoonful every quarter of an hour.

If this does not control the convulsions, fifty centigrammes of chloral with yelk of an egg may be given per rectum. After the convulsions have been controlled there may be fever, or there may not be. Should the convulsions recur and no fever be present, the child may be immersed for a few moments in a bath of warm mustard-water, and this may be repeated if the convulsions continue. Should the convulsions still persist, the child should be wrapped in cotton-wool so as to excite free perspiration. The food should be light and digestible, and consist of milk, soup, etc. If the indigestion is not relieved, another attack of convulsions will almost certainly occur.—*Arch. Pediatrics.*

A Disinfectant Mixure for Apartments.—A contributor to the *Union Médicale* give the following formula:

Camphor	20 parts.
Calcium hypochlorite	50 "
Alcohol	50 "
Water	50 "
Oil of eucalyptus	1 part.
Oil of cloves	1 "

Mix in a large vessel kept cold. A few drops on a napkin are enough to disinfect a room.—*New York Medical Journal.*

A Suggestion Appreciable to the Season.—

Full many a man, both young and old,
Is sent to his sarcophagus,
By pouring water cold
Adown his warm œsophagus.

Hay Fever Cure.—Dr. Moorhead writes in the *British Medical Journal* that he has obtained relief from hay fever, his annual persecutor for thirty years, by hypodermic injection of one-twentieth of a grain of morphine and and one two-hundredth of a grain of atropin night and morning. The relief was complete.

A Vermifuge Powder.—

℞.—Calomel	gr. 2¼
Santonine	gr. 1½
Sacchar. lactis	gr. 15.—M.

This powder should be given in the morning, when the stomach is empty, in a little honey. The dose is for a child four years old.—Boymond, in *Journal de Médecine*, April 17, 1887.—*Medical News.*

Medical Items.

Dr. E. Darwin Hudson, Professor of Diseases of the Throat and Chest in the New York Polyclinic, died at New York on May 9th, aged 43 years.

Dr. E. C. Spitzka, of New York City, has accepted the vice-presidency of the Section of Anatomy of the Ninth International Medical Congress.

The State of Ohio claims to have sixteen institutions licensed to confer the degree of M.D. This is only eleven more than we have in Maryland. But Maryland is a very small State.

The sixth German Surgical Congress which met last month at Berlin, elected Volkmann, President, and Bergmann, Vice-President, and Billroth and Spencer Wells honorary members.

Dr. Elliott Richardson, Lecturer on Clinical and Operative Obstetrics, and Demonstrator of Operative Obstetrics in the University of Pennsylvania, died in Philadelphia on May 9th, of typhoid fever.

The annual commencement of the College of Physicians and Surgeons of New York took place at Steinway Hall on Wednesday evening, May 12th. The address to the graduating class was made by the Hon. Stewart L. Woodford.

A case of blackmail rather than malpractice was recently brought before the courts at Troy, N. Y. Dr. R. H. Sabin was sued by a woman for $10,000 damages on the ground of improper treatment of a case of Colles' fracture. The court dismissed the case and gave the doctor judgment against the plaintiff for $99.44.—*Med. Rec.*

Dr. D. Hayes Agnew, of Philadelphia, has been elected President of the American Surgical Association for the ensuing year. Dr. F. S. Dennis, of New York, and N. Senn, of Milwaukee, were elected Vice-Presidents; Dr. J. R. Weist, of Richmond, Ind., Secretary Dr. P. S. Connor, of Cincinnati, Treasurer and Dr. J. Ewing Mears, of Philadelphia, Recorder.

An International Congress of Inebriety is to be held in London on the 5th and 6th of July, under the presidency of Dr. Norman Kerr. Among the American gentlemen whose names are included in the list of vice-presidents are Dr. T. D. Crothers, Dr. N. S. Davis, Dr. J. H. Blanchard, Dr. L. D. Mason, Dr. C. H. Hughes, Dr. J. B. Mattison, Dr. Joseph Parrish, Dr. T. L. Wright, Dr. E. C. Mann, and Albert Day. Dr. Crothers is the chairman of the American committee.

The North Carolina State Medical Society, at its recent meeting, elected the following officers for the ensuing year: President, Dr. D. T. Haigh, Fayetteville; Vice-Presidents, Drs. W. T. Ennett, Burgaw; J. B. Dunn, Raleigh; Thomas E. Anderson, Statesville; Secretary, Dr. Julian M. Baker, Tarborough; Treasurer, C. M. Poole, Salisbury; Orator, S. D. Booth, Oxford; Essayist, W. C. Galloway, Snow Hill; Board of Censors, Drs. George G. Thomas, Wm. J. Love and W. W. Lane, Wilmington.

Dr. Henry Leffman Editor of *The Polyclinic* (P. O. Box 791, Philadelphia) desires to obtain results of the new treatment of pulmonary consumption and phthisis by gaseous enemata, *for publication in The Polyclinic.* The correct therapeutic value of this method can only be arrived at by the collection of statistics, and he therefore requests anyone who has administered the gas to communicate the result to him, the formula used, and any special information that may be useful.

The fourth annual meeting of the American Climatological Association will be held in this city on the 31st of May and 1st of June in the hall of the New Physical Laboratory of Johns Hopkins University, under the presidency of Dr. Frank Donaldson, Sr., of this city. The programme of the meeting announces a large number of papers on climatological subjects. The address will be delivered on Tuesday, May 31st, at 2 P. M., by Dr. Frank Donaldson, Sr. Among the papers to be read are the following: "The Causes of Cardiac Failure at High Altitudes," by Dr. Frank Donaldson, Jr. "The Climate of the Sub-Peninsula Pineller Florida," by Dr. W. C. Van Bibber. "The Climate of St. Moritz, Upper Engadine, Switzerland," by Dr. Walter Platt. The profession is cordially invited to attend the sessions. An annual banquet will be held at the Rennert House on June 1st at 9 A. M. Dr. W. C. Van Bibber will give a reception on May 31st, from 1 to 3 P. M., at his residence.

The *Paris Medical* of January 22nd, 1887, publishes extracts from a work by M. Dejean, in which the author states that hæmoptysis is not always a symptom of incipient pulmonary phthisis, as is generally supposed, but may be due to dilatation of the bronchi from a varicose condition of the capilaries, or miliary aneurysms of the bronchial mucous membrane. Laënnec, who first described this affection, observed cases of hæmoptysis in which the necropsy revealed several bronchial dilatations, without any sign of the presence of tubercles. Barth, Gombault, Balzer, and other authors have often seen hæmoptysis in patients affected with bronchial dilatations and attributed the bleeding to capilliary aneurysms in the walls of the dilated bronchi. An important feature of this form of hæmoptysis is that the blood which is brought up is rarely frothy, as it is in case of tubercular disease. The differential diagnosis between bronchial and other kinds of hæmoptysis may be established in difficult cases by the presence or absence of bacilli, as has been proved by Dr. Cochez.—*Brit. Med. Jour.*

Original Articles.

THE OPERATIVE TREATMENT OF RETROPERITONEAL CYSTS IN CONNECTION WITH MIKULICZ'S METHOD OF DRAINAGE.*

BY CHRISTAIN FENGER, M.D., OF CHICAGO.

It is not my intention to-night to give an exhaustive review of the entire subject of retroperitoneal or parovarian cysts, but I merely wish to call attention to the subject for discussion, giving some of my own experiences, with a view of bringing out those of other Fellows of the Society.

The subject is that of so-called parovarian cysts, or cysts of the broad ligament, or cysts with fimbriated epithelium, and I wish to call attention to a few facts concerning them before showing specimens.

We know that these cysts are said, in a great majority of cases, to develop from the parovarium, the rudimentary sexual remnant of the Wolffian bodies; more rarely, they are said to develop from the epoöphoron; finally, it is possible that cysts of the broad ligament may originate from hæmatomas.

The canals of the parovarium being lined with fimbriated epithelium, may account for the fact that the inside of a number of these cysts is found to be lined with this form of epithelium.

Parovarian cysts are typically mono-cysts. In this respect they differ materially from proliferating cystomas or other ovarian cysts developed in or into the broad ligament. Both classes are retroperitoneal cyst, inasmuch as they are situated behind the peritoneum of the posterior wall of the abdomen, but the cysts of ovarian origin are more likely to have only a partial retroperitoneal or intra-ligamentous development; that is, part of the tumor within, part outside of the broad ligament, whilst the parovarian cysts proper are more likely to be completely surrounded by the broad ligament. From the broad ligament, and separating its two layers, they commonly develop inward to the sides of the uterus and downward toward the bottom of the small pelvis.

They are usually thin-walled, lined with fimbriated epithelium or mixed fimbriated and common cylindrical epithelium, consequently their interior surface is smooth; and they contain a thin, colorless, clear fluid of low specific gravity, with no formed elements. Between the peritoneal covering and the cyst-wall there is usually a layer of loose connective tissue with but few vessels; which explains the facility with which these cysts may sometimes be separated from the broad ligament covering them, and enucleated without the use of cutting instrument, and with very little harm.

A typical cyst of this kind should have the Fallopian tube on its outside stretched out and flattened, because the cyst develops into the little mesentery of the tube. In the same way the ovary is found stretched out and flattened on the outside of the cyst near the tube. Exceptions to these common anatomical characters, however, are found. The cyst-wall may be thick, may become the seat of secondary growths, such as papillæ or papillomatous fimbriated tumors which, having developed on the inside of the cyst, may perforate the cyst-wall, protrude on the outside, and take upon them a malignant or semi-malignant character, invade the general peritoneal cavity, giving rise to multiple metastatic papillomas.

In cases of this kind, the contents of the cyst is not a thin, clear, serous fluid but resembles more or less the fluid of the ovarian cystomas, with numerous formed elements, viscid character, and hæmatine or blood mixed with it.

The connective tissue layer between the cyst and the broad ligament may not be loose and deficient in vessels, but is sometimes so tense as to make separation of the cyst here almost or entirely impossible, and it may contain numerous large vessels.

As to the symptoms: The cysts usually grow slowly, and do not cause any inconvenience unless they reach a very considerable size. They are usually not very tense. The fluctuation is very distinct and superficial. When such a mono-cyst is large, the abdomen is like-

*Read before the Chicago Gynæcological Society March 18th, 1887.

ly to be flat, when the patient is recumbent, as in ascites, and the percussion note is apt to change somewhat with the position of the patient, thereby sometimes making the differential diagnosis still more difficult.

The parovarian cysts are likely to burst spontaneously, but the contained fluid is so little irritative in character that peritonitic symptoms rarely follow, the thin, clear fluid being absorbed quickly and readily.

On this account, these are the cysts of the abdominal cavity which best permit of puncture or aspiration, as these trifling operations are not uncommonly followed by radical cures.

In this connection I will describe a case which came under my observation in 1884. A girl 18 years of age came to me from Racine, who had a cyst extending above the umbilicus, and about the size of a uterus in the seventh month of gestation. She had been accused by her relatives of being pregnant, but knowing this was not the case, came on here.

On examination I found the uterus of normal size on the side of the cyst, and in my office, with a common hypodermic syringe, I drew off and took away for examination a perfectly clear fluid, and told the patient to come down for operation. She went home to make her arrangements, and came down a month later. The cyst had entirely disappeared, without symptoms of peritonitis.

In a case like this, there may, of course be a doubt as to the correctness of the diagnosis of a parovarian cyst; but it is reasonably certain that this was the case, as one of the characteristics of this class of cysts is that rupture into the peritoneal cavity causes no peritonitis, and the fluid is absorbed without difficulty.

The method of operating on these cysts we owe to Dr. Miner, of Buffalo, N. Y., who published in 1869 his operation by enucleation.

The surface of the tumor, or, rather, the broad ligament, when exposed after the opening of the abdominal cavity, is incised down to the wall of the cyst. In the loose connective tissue layer the broad ligament is now separated from the cyst-wall. By means of the fingers or blunt instruments this separation can be continued, without the use of any force and without appreciable hæmorrhage, until the cyst is completely enucleated, and may be lifted out of the cavity. Evacuation of the cyst fluid after partial denudation of the wall, as a matter of course, facilitates enucleation.

In some cases of parovarian cysts, the development is to such an extent peripheral in the broad ligament that the uterine half of the latter is long enough for the formation of a pedicle. In such cases the usual operation for ovarian cysts may be performed at a sacrifice of the covering broad ligament, with tube and ovary. But such a peripheral development is not the rule, and whenever the cyst is developed down upon the uterus into Douglas' fossa, or farther away still in the retroperitoneal space, enucleation is the only method available for its complete removal.

Difficulties during the course of enucleation arise when the connective tissue is tense and rich in vessels, necessitating dissection with the knife, and numerous ligatures. Further, if a large cyst develops deep down in Douglas' fossa or even behind the rectum, or up into the mesenteries of the intestines, sigmoid flexure, or descending colon on the left side, or cæcum or ascending colon on the right side, we may find in such cases, smaller or larger portions of these intestines spread over the surface of the cyst longitudinally and transversely, just the same as the Fallopian tube. It may be difficult, almost impossible, to remove the cyst-wall from the intestines in such cases, and danger may arise from the fact that the intestines will not bear denudation of the muscular layers to any extent, as it easily becomes gangrenous.

The first case I met with was that of a married woman, 22 years of age, from Racine, who had a cyst which had been developing for two years. It was as large as a gravid uterus at term and contained a clear fluid. When the abdomen had been opened and the covering broad ligament had been incised down to the cyst-wall, I commenced dissecting with a view to enucleation, but after

working about half an hour dissecting and ligating vessels, I had advanced but very little. All that I could get out of the cyst was a piece as large as the palm of the hand. Consequently I was obliged to leave the cyst, after having united the opening into it with the abdominal wound and made use of a method of drainage of which I had intended to speak this evening, the so-called Mikulicz drainage. The patient made a good recovery.

About a year ago, Mikulicz of Cracow proposed the following method of drainage, not only for retroperitoneal cysts, which can be excluded from the general peritoneal cavity by uniting them to the abdominal wound, but also for drainage in the peritoneal cavity itself. He takes a small piece of iodoform gauze, stitches a silk thread to the center of it, and folds it up in the form of a pouch, the silk thread being inside that the pouch may be drawn up from the bottom by it. The pouch is now pushed down to the bottom of the cavity, and if nooks and corners exist, it is pushed out so as to completely fill them. In the inside of the pouch is packed with strips of iodoform gauze, as much as is necessary to completely fill up the spaces. This is the advantage claimed by Mikulicz for his method of drainage as compared with the use of glass or rubber drainage.

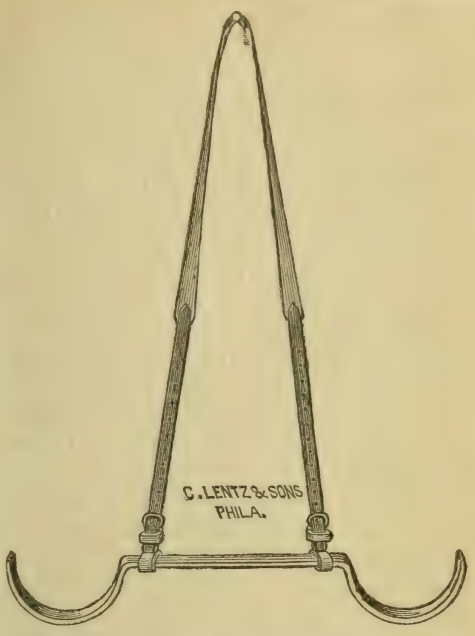
A NEW APPARATUS FOR MAINTAINING THE LITHOTOMY POSITION.*

BY THOMAS B. MCBRIDE, M. D., OF PHILA.

I desire to present to the Society, this evening, an apparatus I have designed for the purpose of supporting the limbs and maintaining the lithotomy position.

It consists of a piece of hard, elastic wood, preferably ash or hickory, ⅜ of an inch thick, 1 inch wide, 36 inches long, bent at each end in a semicircle of 6 inches diameter, or a semicircumference of 10½ inches, thus leaving a shaft of 15 inches between the semicircles, and making the finished length of the instrument 27 inches (6+15+6).

*Read before the Philadelphia County Medical Society, May 11, 1887.



To the shaft, 2 inches from each end, a buckle is immovably fastened by means of leather.

A band of webbing, finished at each extremity with a leather strap, the whole 50 inches long, completes the device.

In using the apparatus the thighs are flexed on the abdomen and put in the semicircles, the band is placed around the neck and fastened to the buckles.

The advantages are apparent. Its cheapness places it within the reach of every one. The thoroughness with which it does its work, keeping the patient immovably in the lithotomy position, and maintaining the same relative position of the parts; the fact that it does not interfere with the circulation; the strength, lightness, and remarkable simplicity will, I think, render it a valuable acquisition to the surgeon and gynecologist.

ASTHMA TREATED BY BERGEON'S METHOD.*

BY S. SOLIS-COHEN, M.D., OF PHILA.

By request of the Chairman of the Directors, I will briefly report a case of asthma in which immediate relief fol-

*Read before the Philadelphia County Medical Society, May 11, 1887.

lowed the injection into the intestine of the mixture of carbon dioxide and hydrogen sulphide, as recommended by Bergeon. Having noticed in Morel's paper reports of two cases in which success attended the experiment in one of the Parisian hospitals, and a case presenting itself which offered a fair test, I determined to make the trial.

The patient is a stout married woman, about fifty years of age, of somewhat neurotic temperament, who has for some years been subject to attacks of spasmodic asthma, ordinarily manifesting recurrent paroxysms, lasting ten or twelve days. In the intervals there is neither bronchitis nor dyspnœa. There is no heart lesion. I have seen her in previous attacks, which have been relieved by methods with which we are all familiar. In one particularly obstinate seizure, by advice of Dr. J. Solis-Cohen, the patient was sent to the gas works, and was benefited by inhaling the carburetted vapors there produced. I saw her on the second or third day of the attack, and proposed the injections, but could not obtain consent. Not wishing to complicate the therapeutics too much, in case she should later accede to the proposal, I simply prescribed, as a palliative for the dyspnœa under which she labored between the paroxysms, quebracho, in twenty drop doses of the fluid extract, repeated hourly or half-hourly, according to indications. This, of course, gave great relief, but a paroxysm recurring in the evening, the patient consented to try the injection. Almost immediate relief was experienced. Some dyspnœa persisted, but there was no further paroxysm, and the dyspnœa gradually lessened, finally disappearing within thirty-six hours. After six injections, the latter ones being prophylactic rather than therapeutic, the patient professed herself feeling better than for years, and auscultation revealed only normal breath sounds.

This is, of course, but a single case; yet having a standard of comparison in previous attacks in the same individual, I can, so far as one case is worth anything, confirm Morel's claim that the rectal injection of carbon dioxide and hydrogen sulphide is beneficial in asthma. Which of the two gases is the active agent, and whether it would be equally efficacious by inhalation are questions which I do not now desire to discuss.

Society Reports.

BALTIMORE ACADEMY OF MEDICINE.

REGULAR MEETING HELD MAY 3 1887.

A CASE SHOWING THE IMPORTANCE OF MICROSCOPIC EXAMINATION OF THE URINE.

Dr. F. T. Miles reported an obscure case of brain disease in a patient who had consulted physicians in Philadelphia and New York for glaucoma. When he saw the case the mental hebetude was great. He asked for a specimen of the urine and tested it for albumen by the layer test pouring in the nitric acid first, and also by heat and nitric acid, and found it absolutely clear and free from albumen as the specimen he exhibited showed. The urine had been examined by the other physicians, and they had also reported absence of albumen. Dr. Miles then took from the bottom of the vessel with a pipette a few drops of the sediment and examined it under the microscope and found a large number of the tube casts, very faint, hyaline and small, and no renal epithelium. If it had been a case for life insurance he would not have thought of looking for casts when no albumen was or had been present. He wished to impress upon the Society the importance of examining the urine microscopically in doubtful cases when albumen was absent. This was not the first, second or third time that such a case had come under his notice. He had often found cast where albumen was not present, but had been present at a previous examination. He should not care to examine his own urine. Thinks it is very important to look for casts even when no albumen is or has been present.

DISCUSSION.

Dr. James Carey Thomas asked if Dr. Miles made such examinations for life insurance.

Dr. Miles said the retina showed us signs of nephritis, but that the renal changes might have been caused by a reflected effect upon the kidney without retinal change.

Dr. T. A. Ashby asked how the absence of albumen without tube casts could be explained in this case.

Dr. F. T. Miles said that the watery parts and the salts of the urine were secreted by the epithelium which covers the glomeruli and that the other ingredients of the urine were supplied by the tubular parts. Injury of the glomeruli would allow albumen to escape in the urine and yet no epithelium would pass. He did not think the presence of albumen in the urine a matter of grave importance, but on the contrary thought that any one of the members present could find albumen in their urine at some time in the day. He said that lead, mercury or a slight congestion of the kidney were often sufficient to produce it. He mentioned Heidenhain's theory of balance. Heidenhain clamped the renal artery in a dog for a moment only and then let it go to allow the blood to rush back into the kidney. This happened, but the urine was secreted at first only in very small quantities and was albuminous. He thought this argued against the filtration theory of urinary secretion. He referred to a case in a medical student of cyclic albuminuria. He did not look for tube casts. He said that in one-half of all cases of albuminuria there was not disease of the kidney and in all cases of the so-called albuminuria of adolescence.

Dr. T. A. Ashby had seen several similar cases of albuminuria. He mentioned three. The first was a case of cyclic albuminuria where at times 30 to 50 per cent. of albumen was found and no tube casts. The man had repeatedly been turned down by an insurance company but was finally accepted for a small amount and was at last accounts living and well. The second case was somewhat similiar. Much albumen was found and he had at the time much headache and was declined by an insurance company, although apparently in health. A second examination later showed same results, but no other unfavorable symptoms. No microscopic examination was made. A third case showed 50 per cent. of albumen with no tube casts present and yet he had many symptoms of renal disease. At present he is much better, but his urine still showed albumen. He gave Basham's mixture and Buffalo Lithia water. He thought that Dr. Miles, point was a good one and that the time would come when many life insurance companies would accept cases with albuminuria. Dr. Pavy had reported a number of cases of cyclic albuminuria.

Dr. James Carey Thomas spoke of the albuminuria of adolescence which he considered very interesting. Such cases he thought did not go on to the further development of renal disease. It was not always easy to distinguish it from renal diseases, for tube casts did not seem to be always pathognomonic.

Dr. Miles said that this albuminuria might come from some poison in the blood (He remarked that a specimen of urine containing tube casts might be kept a long time by adding a small amount of carbolic acid to it). He showed a specimen of urine from a patient who had had capillary bronchitis, which went on to catarrhal pneumonia, coma and death. He passed much urine up to forty-eight hours before death and in it was found a large amount of epithelium and epithelial casts which Dr. Miles stained with fuchsin. He could not say here what was the primary cause of death. His urine had been examined shortly before his death and he had had his life insured. He thought the kidney might take on disease at the end of life from other causes.

Dr. John Uhler said this was an important subject and required great care. He invariably took three specimens from each patient. He let the patient pass the urine in three different chambers. The first chamber contained what was passed from the urethra, the second

that from the bladder and the third from the parts higher up. He then examined the urine in the middle chamber and thought that with care he avoided many doubtful cases. He thought we should depend on the concomitant symptoms as well as on the presence of albumen and tube casts. He wondered that there were no retinal changes found in the case mentioned by Dr. Miles.

Dr. J. J. Chisolm said the evidences of retinitis were very marked and could easily be detected at once, but that they did not occur with every case, that diagnosis from the retina alone was often made, but that many died without retinal changes.

Dr. Uhler asked it were not difficult to diagnose the dotted condition of the retina at the end of Bright's disease.

Dr. Chisolm said it was, that there might be many complications with glaucoma, and that a person with, as well as without renal disease might have a glaucoma.

Dr. Uhler thought that glaucoma was present in Dr. Miles' case.

AN OPENING IN THE TRACHEA.

Dr. J. J. Chisolm related the case of a patient who came to the Presbyterian Eye and Ear Charity Hospital with an incision is his throat about the size of the finger nail. It looked very much like a wound after tracheotomy. He said he had had no such operation performed, but had had some time ago a swelling there which a country physician had opened and had evidently cut into the trachea as he could blow air through it.

Dr. J. C. Thomas asked if there was anything to prevent its healing.

Dr. Chisolm said it had not healed, but why, he did not know, there was no specific history.

VESICO-VAGINAL FISTULA DUE TO CHANCROIDAL ULCERATION.

Dr. T. A. Ashby related a case in which the urethro-vaginal septum of the bladder had been entirely destroyed by chancroidal ulceration. The woman was 50 years of age and had contracted the disease from her husband. She also had secondary syphilis. The entire urethra and portion of the bladder had sloughed away leaving a large opening into the viscus and total destruction of its function. The parts had cicatrized and the vagina was a mass of cicatricial bands and adhesions. The woman denied that she had had any trouble in childbearing. At first it was thought the ulceration had been the result of malignant disease, but the condition of the parts and other evidences of specific disease negatived this view. The case was considered hopelessly incurable so far as a plastic operation was concerned.

DEATH FROM OBSCURE BRAIN TROUBLE.

Dr. F. T. Miles was called in by Dr. Billingslea to see a lady who was lying in a semi-comatose condition in which she had lain for three weeks. She was 50 years old, well-nourished, looked normal, could be aroused, but took no notice of those about her, would get up to attend to the calls of nature or eat when aroused. There was no emaciation and she gave the idea of hysteria except that she was too old. The family did not seem anxious about her. He recommended the battery. A week later he found she was dying, much emaciated, comatose, passed her evacuations in bed and finally died. He wanted a post-mortem and mentioned what he expected to find. He made the examination. There was not much emaciation about the body. No escape of blood and the tissues were very dry. The skull was not thick, dura mater not inflamed, no enlarged pacchionian glands. He cut into it and found the watery, 'sobby' look of the pia mater so often observed after congestion. This he stripped off very easily. The brain seemed to be normal. He could find nothing but some congestion in the corpus striatum and was about to put the brain back when he noticed a trickling of blood by the sella turcica. He felt around the pituitary gland which he had not removed and found this black mass (showing

specimen) which ran down to the jugular foramen, a little fibromous melanotic deposit, but there was nothing further and he did not know the cause of death. There was evidently a melanotic degeneration of the pitiutary gland. There had been no hemiplegia, no paralysis, no congestion of the head and face. She looked natural. He also remarked that in spite of an exact knowledge of any given bone of the head, the position of the dura mater made a great difference in its appearance, especially in the dim light of a dark room that it was difficult to define the exact location of a lesion.

DISCUSSION.

Dr. G. L. Taneyhill asked if there was no cause outside of the brain which might have caused death.

Dr. Miles said there was none.

Dr. Hiram Woods asked if the ears had been affected.

Dr. Miles said no.

Dr. John Uhler asked if the mucous membrane of the stomach had been examined.

Dr. Miles said he had not examined the stomach.

Dr. Hiram Woods read a paper on

CHLOROFORM AND ETHER.*

DISCUSSION.

Dr. J. J. Chisolm had had little experience with ether. Bromide of ethyl had with him supplanted the use of chloroform to a large extent. It enabled him to operate in the primary anæsthesia, *i. e.*, before the patient wakes up from the first sleep. He had had thirty-five years in surgery and had given chloroform every day with no death, *i.e.* about 15,000 cases and no death. He thought it was hardly right to take the percentage of deaths, as in one case, a physician whom he knew had administered chloroform once and the case died, so that he had a mortality of 100 per cent. Bromide of ethyl would bring a patient under in one half a minute and and in many cases if continued a half minute longer than absolutely necessary, it could kill the patient. When used too long ashiness of the face occurred and the heart's action stopped. He had never had a death from it. It was not given in New York and Philadelphia. His inhaler was a closed tin cone absolutely tight, lined with flannel and rim covered with padding to fit the face; 3 ss to 5i of the bromide of ethyl was sufficient. It was very volatile so that the cone should be inverted at once. He made the patient blow out forcibly before the cone was applied. The patient was under it in a half to one minute and had a natural appearance unless the anæsthesia continued over one to two minutes when the ashy skin would denote danger. The oculist probably had better results with chloroform because the eye was so near the nose that the inhaler was removed during a part of the operation and if respiration became difficult the chin was elevated which had the same effect as drawing out the tongue. Had never had heart arrested. He always elevated the feet on the principle of Nélaton who found that when a rat thoroughly anæsthetized was held up by the tail, it would begin to revive and when put down would remain quiet. He mentioned a case in which Dr. Woods gave chloroform to an old man 82 years old for cancer of the ear; respiration being arrested they hung him up by the heels and completed the operation.

Dr. P. C. Williams asked Dr. Chisolm why he preferred bromide of ethyl.

Dr. J. J. Chisolm said for short operations the patient could be brought under anæsthesia at once, had no nausea afterwards and could get up and go home. He thought too much could be given just as one might give too much morphia.

Dr. Bombaugh asked if he used nitrous oxide gas.

Dr. Chisolm said it was too bulky and difficult to prepare and patients resisted it and patient might wake up too soon. He thought the careful administration of chloroform free from danger. He knew little about ether. Had prob-

*See MARYLAND MEDICAL JOURNAL, May 14th and 21st, 1887.

ably used two quarts in his life and was ashamed to say how many hundred gallons of chloroform. Ether was too uncomfortable.

Dr. T. A. Ashby said that for several years, during his service as resident physician to the Maryland University Hospital, it was his almost daily duty to administer anæsthetics. In this way he had enjoyed a very large experience. He had never witnessed trouble from the use of chloroform and preferred this agent to ether. During the past few years he had yielded somewhat to the prejudice against chloroform. He was now in the habit of giving chloroform in short operations. When the patient was kept under an anæsthetic for any great length of time, an hour or longer, he continued the anæsthesia with ether. He prefers chloroform in all cases where the patient bears it well. He once kept a patient under the complete influence of chloroform for four hours and a half in an operation for vesico-vaginal fistula. The case bore it well. He substitutes ether for chloroform in long operations when the latter depresses the heart's action. He thinks the anæsthetic should be selected for the case just as we select the operation. He thinks the merits of these two agents should not be judged in a partisan way. They both have their special advantages and should be employed with the same intelligence and care that we employ other narcotic and dangerous drugs.

Dr. Canfield said he had seen stated in a foreign work that ether was universally used in America, the use of chloroform being prohibited by law. He knew of no such law.

Dr. Chisolm said if a death from chloroform should occur in Boston, it would be unpleasant for the surgeon. He mentioned a case related in Pancoast's Surgery in which apparently not enough chloroform had been given. He thought the verdict should have been "death from want of chloroform" rather than "death from chloroform."

Dr. Woods thought the last point was a good one. Thought partial anæsthesia very dangerous and quoted from Bartholow and Lister in Holmes' Surgery to prove his point.

Dr. Chisolm thought chloroform required skill, the blunderer could use ether. Ether he thought was like a dull knife for the boy, and chloroform the sharp razor for the man.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING HELD APRIL 15, 1887.

The 192nd meeting was called to order by the President Randolph Winslow, M.D., in the chair.

Dr. William B. Canfield read a paper entitled

SOME REMARKS ON PULMONARY PHTHISIS.

He reviewed the different theories explaining why the first physical signs of pulmonary phthisis are generally observed at the apex. He laid particular stress upon the views of Dr. Athur Hanan as being the most satisfactory explanation. Dr. Hanan's conclusions are: The apices take an active part in inspiration and are therefore in an especially favorable condition to receive all dust and micro-organisms mixed with this dust; the apices expire badly and hence the inspired particles find the best opportunity to remain where they are or by a retrogade current of air to be driven still deeper into the lungs to the inner surface of alveoli.

DISCUSSION.

Dr. I. E. Atkinson said the points brought forth by Dr. Canfield were very interesting, but the views regarding the cause were so various, that he felt unable to express any positive ideas on the subject.

Dr. J. H. Branham said he knew that the parts of the lung at the apices were not so active as the lower part and that foreign substances would remain there longer, but he could not see how infection through the blood could be explained in the same way.

Dr. F. C. Bressler then read notes on and exhibited a specimen of

ANEURISM OF THE ABDOMINAL AORTA.

The report of the following case is interesting in that it is, as far as known, the youngest patient in whom aneurism has occurred in this city.

Geo. W. Smith, colored, æt. 25, occupation oyster shucking, lately employed in a lumber yard, gave the following history: Contracted syphilis 4 years ago. He was plåced on the usual treatment and responded quickly to treatment. Suffered occasionally with headache. Last May, 1886, while employed in the country, began to suffer with pain in the stomach, which was of a paroxysmal character. Leaving this place, got a situation in a lumbar yard; this was in September. The work was hard, requiring considerable lifting of heavy lumber. While thus employed, one day lifted a piece of timber heavier than he had been accustomed to, he immediately afterwards complained of severe pain in his stomach and back. He applied to one of our city dispensaries, was told that he had Bright's disease, while his abdominal pains were treated with electricity. The electricity seemed to increase his pain and had to be stopped. He found no relief under this plan of treatment, gave up his position and remained as quiet as possible.

His pains varied, sometimes so severe as to compel him to remain in bed for some days; again his pains eased up so as to be free altogether from them for days, still no matter how mild, they were always localized in the stomach and back.

Occasionally he would vomit, and just before death—a few days—his stomach was so irritable as to reject the smallest quantity of anything taken. Paroxysmal pains, vomiting and constipation were his symptoms up to three weeks before death. Now other symptoms made their appearance.

One morning he was taken without premonitory symptoms with a convulsion, the same day had another; six days elapsed without having any more convulsions, when he again had one in the morning, which was followed by 11 during the balance of the day. He was immediately purged and mustard applied to various parts of his body with the result of so modifying the number as to have but two during the day following the one on which he had the 12. From this day on he had no more, but in place of convulsions delirium set in; at the same time he became blind in both eyes. He remained in this delirious condition up to a few days before death, when he again became rational, while his eyes never improved.

His urine was diminished in quantity and actually suppressed the last two days before death.

The night ere he died, had a stool mixed with blood.

Throughout all this time, his only complaint would be that of intense pain in his back and stomach.

The temperature varied slightly, three days before death it reached 101°, while the night before he died it reached only 98°.

Heretofore no œdema was observed but two days before death found both feet moderately swollen.

Death took place suddenly, the result of internal hæmorrhage, due to bursting of the aneurismal sac.

One thing attracted my attention rather forcibly, a full and incompressible pulse. This peculiarity was so marked as to cause me to think that there certainly must exist something which impeded the free passage of the blood onwards through the blood vessels.

I compared the femorals with each other, likewise comparing the femoral with the radials, but could find no marked difference as to the filling of the blood vessels or their time of pulsation. Suspecting some deeper seated lesion I began a close physical examination with the following results:

Lungs normal.

Heart area of dullness increased with an impossibility to locate apex. A *bruit* accompanied the first sound and heard best at apex.

Contour of abdomen normal, but palpation elicited an apparent tumor, situated midway between ensiform appendix and umbilicus about two inches to the left of the median line. Pressure on it

gave rise to considerable pain; it could be easily outlined, that is, its lower part. No expansive pulsation present; a well marked *bruit* was readily gotten, but owing to the heart's apex having been displaced from its normal position, it was impossible to differentiate it from an aneurism or a displaced heart.

Knowing our patient's history, adding to it a heavy strain, together with paroxysmal pain, a probable diagnosis of aneurism of the abdominal aorta was made.

Post-mortem made by Dr. Chambers, Saltry, Currie and myself revealed the following conditions:

Old pleuritic bands on both sides of chest.

Lungs normal.

Heart hypertrophied. Valves normal.

Stomach, peritoneum, liver and bowels congested with patches of extravasated blood in them.

Right kidney enlarged slightly, capsule non-adherent, kidney in apparent normal condition.

Left kidney smaller than right, capsule non-adherent; blood extravasated throughout the parenchyma likewise conjested.

On displacing the bowels, a solid mass, which seemed to be made up of clotted blood, was found; on tracing the aorta from the above downwards, it was found to terminate in this mass, which on further dissection proved to be an aneurism located opposite the 2nd, 3rd, and 4th lumbar vertebræ, eroding the bodies of these vertebræ to a slight extent. A rent was found on its posterior aspect, allowing the blood to infiltrate the retro-peritoneal tissues and completely encapsulating the kidneys.

This case is exceedingly interesting from the following points:

1st. The age at which it occurred, namely 25, this being the youngest case recorded in our city as far as could be ascertained.

A man 25, with aneurism is not a common occurrence, from the fact that aneurism is not expected. Therefore paroxysmal pain occurring independently of any apparent cause, recurring for months, together with a history of syphilis in a patient should be looked upon with some suspicion and aneurism searched for.

2nd. A tumor in the abdomen immediately under the anterior edges of the ribs with the usual signs of aneurism namely, expansion, pulsation and retarded pulsation below seat of aneurism absent.

3rd. The difficulty in absolutely diagnosing aneurism, in that the apex of the heart could not be located, with a *bruit* heard loudest beneath the ensiform appendix and a history of pleurisy some years ago, which might have displaced the heart apex into the same situation in which the aneurism was.

4th. Peculiarity of the pulse. A full and incompressible pulse associated with hypertrophy of heart, with the absence of any plain cause which may give rise to the same, ought to attract our attention to some deep-seated trouble which impedes the ready onward flow of the blood and ere we clinch our diagnosis, aneurism ought to be thought of and excluded.

DISCUSSION.

Dr. N. G. Keirle, in connection with Dr. Bressler's case, showed a specimen of aneurism to which he called attention, especially regarding its mode of preparation. The patient, from whom it was obtained, was found dead in a water-closet at the old Almshouse about twenty years ago. The specimen was stuffed with horse-hair and put into a solution of hg. bichlor. At the present time it is in a good state of preservation.

Dr. John Chambers said the President had reported, a few years ago, a case of gun-shot wound of the aorta where hæmorrhage took place and the patient lived for several days. He thought that the convulsions in Dr. Bressler's case were due to pressure on the kidneys from the hæmorrhage which had taken place before death. The kidneys were found to be compressed. No urine could pass. Right kidney was markedly congested.

Dr. A. K. Bond spoke of a case that he had seen while a student at Bay View Asylum; the patient was about 30

years of age and suffered a great deal from pain in the limbs which was thought to be specific. He was treated accordingly but grew worse. One day, while at stool, he was heard to cry out suddenly and when found, he was lying on the floor in a state of collapse, stimulants were freely given, but he died in four or five hours. Post-mortem revealed an aneurism which extended from the diaphragm downwards to Poupart's ligament. One or more ribs had been absorbed. Death was caused by perforation of the aneurism into the pleural cavity, which took place while the patient was at stool. He thought that as changes in the character of the pulse take place in nephritis, it was of no diagnostic importances in aneurism.

Dr. Bressler said that he knew that the pulse is usually weak in aneurism, though it depends a good deal upon the seat of the tumor. In this case the aneurism was some distance from the heart. The heart was greatly hypertrophied. He did not think the increased pulse was due to nephritis.

Dr. Atkinson asked if the patient had unequivocal symptoms of nephritis.

Dr. Bressler said that he had examined the urine and found no evidence of the disease present.

Dr. Atkinson, continuing, said, in the absence of symptoms of renal trouble it is hard to attribute the strong pulse to that cause. There are many conditions where a full pulse is obtained, *e. g.*, aortic regurgitation. We do *not* have it as characteristic of aneurism. He then related a case of a negro man at Bay View Hospital who had a full pulse and hypertrophy of the heart. Local pulsation in the abdomen. A systolic and diastolic murmur was audible over the tumor and even down to femoral arteries the double murmur could be heard. In regard to the conclusions in Dr. Bressler's case, it was difficult to understand. When associated with blindness it means some trouble in the brain or blood-poisoning, say uræmia. He did not agree with Dr. Chambers as regards suppression of the urine to explain them. Cases are not infrequent where the ureter on one side is stopped and the patient lives for days without uræmia. The diagnosis of abdominal aneurism is by no means a simple matter; when there is pain, systolic bruit, etc., not much difficulty, but these symptoms are not always present. He did an autopsy at Bay View where a false aneurism was found and the patient had been able to go about with no especial symptoms pointing to such conditions during life. Had also another patient, syphilitic, where pulsation and *bruit* were present, who had suffered a good deal of pain at one time. He was put upon iodid. potass., and in a few months the symptoms disappeared; conditions of the pulse do not direct our attention to aneurism.

Dr. G. H. Rhoé said he was of the opinion that the full pulse in this case was due to syphilis. It has been shown that a similar change takes place in this disease as regards the blood vessels as is found in Bright's disease.

Dr. Chambers said if the ureter is gradually compressed he agreed with Dr. Atkinson in reference to uræmia, but in this case pressure came very suddenly. Shock was thrown upon the other kidney which prevented it from performing its work and uræmia resulted. He thought the blindness was due to that cause. The convulsions occurred without paralysis. There was no appearance of any disease in the kidney microscopically, so the symptoms, he thought, were due to the pressure on the ureter.

Dr. Bond asked Dr. Bressler whether there was any atheroma of the arteries and if the brain had been examined.

Dr. Bressler replied that no evidence of atheroma could be made out. The brain was not examined.

Dr. Keirle then exhibited a specimen of what he termed the

THIRD LOBE OF THE PROSTRATE GLAND.

The patient was about 60 years of age. There was no evidence of any inflammation of the gland. Bladder was filled with urine. He removed the bladder, ureters and kidneys together. Enlarged prostate was suspected and he slit up the urethra to the gland, where a

little body was found projecting into the urethra. The bladder was much hypertrophied and sacculated. Ureters distended; kidneys smaller than normal; lobulations had reappeared and the organs were in a state of chronic inflammation. In strictures of the urethra, he said, the kidneys are large, yellow in appearance and have nothing to do with Bright's disease. Don't find casts in in this form of kidney. The cause of death in this case was œdema of the brain. Considerable gelatinous fluid was found.

Dr. J. H. Branham said that as a No. 10 sound in this case could only be passed after death, he thought the failure to do so during life was due to conjestion of the portal circulation which seemed to come on in prostatitis. Belfield, he said, has called attention to this point.

Dr. I. E. Atksnson stated that he was using at the University Hospital the apparatus for the administration of gaseous enema in the treatment of phthisis, and he invited the members of the Society to come and witness the operation.

Conditions which Aggravate Syphilis. — Forinier (*Quarterly Compend. Med. Science*) maintains that certain physical conditions in the person infected have more to do with the gravity of syphilis than the quality of syphilis virus. These conditions he discusses as follows:

1. Alcoholism. A powerful factor in increasing the virulence of this affection, favoring the spreading and increasing the intensity of the cutaneous lesions; producing severe symptoms, tertiary in character, early in the secondary stage; creating special types of eruption, malignant, and involving large areas of the skin surface, causing more frequent outbreaks of the syphilides, depressing the system, and finally predisposing to early nervous manifestations and causing deposits in the brain and spinal marrow.

2. Age. Syphilis is always severe at the two extremes of life. In the infant the disease, whether inherited, congenital or acquired, is very frequently fatal, in striking contrast with its benignity in the child two, five or six years of age. In the adult it is usually mild. After fifty or fifty-five years the disease begins to be severe, and in old age it is extremely virulent.

3. Scrofula and tuberculosis act on syphilis and give rise to special symptoms, and at the same time syphilis exerts an unfavorable influence on those diseases. In those cases the syphilides have a moist, suppurating and fistulous character; ocular, osseous and articular lesions are frequently present; and the larynx, pharynx and nose are early and deeply involved. In scrofulous subjects a particular mixed kind of inflammation of the glands is noticed and in patients with tuberculous tendency pulmonary lesions are very often hastened.

4. Malaria also predisposes to grave forms of syphilis as seen in those affected with malarial toxæmia.

5. All agents which depress the vital economy can serve as factors of virulence in syphilis, such as extreme poverty, bad hygiene, insufficient alimentation, prolonged lactation, fatigue, mental worry, etc.—*American Lancet.*

Enormous Scrotal Hernia.—The President, Dr. A. A. Smith, exhibited before the Clinical Society of New York a patient, aged fifty years, with an immense scrotal hernia, forming a mass which reached almost to the knees, and measuring twelve inches long and twelve inches across. The patient had been able to reduce the hernia until a year ago. The penis was seen retracted at the upper and left side of the mass, and the testicles were felt in front of it. Though most of the intestines must have passed into the tumor, yet the abdomen was not much retracted. He had kept the patient on his back for a few days, and intended doing so for a few days longer before attempting any operative interference. The reduction would require to be gradual, as there was considerable danger either from shock or sudden pressure upon the blood-vessels of the abdominal viscera in too rapid and abrupt reduction.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, MAY 28, 1887.

Editorial.

THE TREATMENT OF INTRA-PERITONEAL INJURIES.—Some six years ago when Marion Sims advocated the opening of the abdominal cavity in the treatment of gunshot wounds of the intestines and suggested this method in the case of the late President Garfield there were numerous hands raised in disapproval of the boldness and rashness of this great surgeon's views. Sims was in advance of his day. Were he living now he would witness an almost general acceptance of his views. Only a few years of experience have demonstrated to the surgical world the advisability of opening the abdominal cavity in cases of visceral injury from gunshot or other penetrating wounds. The old expectant method of treatment has had its day. The surgeon now worthy of the name would not hesitate to explore the peritoneal cavity in search of bleeding vessels or wounded viscera in order that he might apply the rules of sound surgical practice. The old belief in the necessarily fatal character of injuries of the class here referred to, and in the utter futility of interference with the course of nature in her dealings with such injuries is happily giving place to sound and rational principles of treatment and to a surgical enterprise and skill in dealing with such cases that the outlook for this class of injuries is most hopeful.

In an oration recently delivered before the Medical Society of London, (*British Medical Journal*, May 7, 1887) Sir William MacCormac has invited renewed attention to this subject by summing up the progress it has made and by showing its present status. Sir William MacCormac attributes the vast improvement both in method and results to the introduction of Listerism which now enables the surgeon to deal with these cases with a success that was impossible in pre-Listerian times.

As can be well understood Sir William MacCormac regards the question of diagnosis of wound of the bowel of primary importance as upon the speedy determination of this point and prompt consequent action must altogether depend the success of treatment. The symptoms of visceral injury are in many cases so obscure that the surgeon must often find himself greatly embarrassed. An uncertain diagnosis exposes the patient to great risk if an operation be undertaken under such circumstances, whilst to leave the case untreated until the diagnosis becomes positive may seriously lessen the chances for recovery. Under such circumstances Sir William MacCormac is inclined to regard an exploration of the abdominal cavity as less dangerous to the patient than inaction.

The method of treatment hinges upon the condition of the wounded viscera. Sir William advises median section of the abdominal cavity and a careful examination of the viscera. Bleeding vessels are first ligated and the operation of enterorrhaphy is advised in all cases of punctured and incised wounds, unless the parts are so damaged that an artificial anus seems preferable. He objects to the formation of an artificial anus whenever it is possible to close the wound by suture, and he regards an artificial anus not only undesirable but unnecessary in those cases where the injury does not extend more than half-way around the calibre of the tube, or where the convexity of the bowel is wounded. He says the surgeon has but half accomplished his work if he forms an artificial anus rather than at once attempt to restore the continuity of the intestine. Should the patient recover, a further operation will be re-

quired to close the fæcal fistula. "Besides should the original damage be in the upper portion of the small intestine, there is considerable probability of the individual being starved or so weakened by the escape of nutriment that he becomes unfit to be submitted successfully to any operation." Sir William MacCormac condemns the use of probes for diagnostic purposes on the ground that probing these wounds is harmful to the sufferer by possibly disturbing the parts and giving rise to fæcal effusion. Three conditions are considered necessary to ensure successful suture of the intestines (1) "Two adequately broad and sufficiently wide surfaces of peritoneum must be brought into contact. (2) The mucous membrane must be excluded, for when the needle passes through the whole thickness of the gut, peritonitis generally ensues from leakage taking place along the line of the thread. (3) Rapidity of execution is of extreme importance, and that form of suture is the best which can be applied in the shortest time."

After the closure of the intestinal wound the abdominal cavity must be perfectly cleansed of all blood and foreign matter. Irrigation with a 3 per cent. solution of boric acid, at temperature of 100°, made with water previously boiled is regarded the best and gentlest method. The external abdominal wound should be closed as after ovariotomy. If the operation be done shortly after the accident, drainage may be dispensed with. If some time has elapsed, or if peritoneal inflammation be present drainage is advised.

Gunshot wounds of the intestines are regarded as injuries of the most fatal character. Owing to their concealed nature the diagnosis becomes a matter of difficulty. Sir William advises that the external wound be carefully probed or sufficiently enlarged as to enable the surgeon to explore its whole length as it passes through the abdominal wall.

These injuries are attended with considerable hæmorrhage and great shock. The absence of fæcal matter in the parietal wound is no proof that the intestine is not perforated. The occurrence of bloody stools is usually a late symptom. In the treatment of such injuries Sir William advises immediate abdominal section with the view of determining the extent of the injury and the treatment which should be adopted. The entire cavity and its contents should be thoroughly examined. When several small openings exist close together he considers it better to resect the portion of intestine involved. Strict cleanliness and antiseptic precautions are enjoyned.

Sir William MacCormac's experience enables him to speak hopefully in regard to the operative treatment of intestinal injuries. His methods and views are entitled to careful consideration and thoughtful study. His address, to which we are indebted for these few suggestions, is well worthy of careful reading.

Miscellany.

Gunshot Wounds.—Gunshot wounds of the intestine are injuries of the most fatal description. They are of frequent occurrence in time of war, and far from being rare in civil practice, especially in America, where everyone carries a revolver, and often uses it on small provocation.

About one-tenth of those slain in battle perish from abdominal injury, but only 3 to 4 per cent. of those who come under treatment are wounded in the abdomen. These wounds are almost invariably concealed, the gut being seldom protruded. Wounds of the duodenum are comparatively rare, and usually associated with other severe injury. The jejunum is more frequently wounded, but the ileum is the most frequent seat of gunshot injury; damage to other parts is often present, or a multiple wound of the intestine itself. Alexander relates a case occurring in the Crimea where the intestine was wounded in sixteen places by the same bullet. If this were common, operative surgery would prove of little avail; but it is rare that more than two convolutions are perforated, or that the intestine is wounded in more than four places. In a few instances the bullet may perforate and lodge in the bowel; this is

proved by it being voided at stool shortly after, and this happens most frequently in wounds of the large intestine. When discharged *per anum* at an early period, the bullet has presumably penetrated the gut; when the missile is passed at a late period, it probably gained admission to the tube from some adjacent part by secondary ulceration or abscess.—*Sir Wm. MacCormac.*

The Medical Profession in Italy.—There are in Italy 17 medical faculties which have the right to give medical diplomas. The number of diplomas conferred every year is, on the average, about 630. There are 14,467 doctors of surgery, 2,415 doctors of medicine, and 686 surgeons—in all, 17,568 practitioners; of these, 642 are in the army and 115 in the navy. The Faculty of Naples has the largest number of students, namely, 1,356. The number of pharmaceutical chemists is 11,347, although in 3,581 communes no apothecaries are to be found. The midwives number 9,860, each of whom attend on an average 80 cases in the year. There are 2,908 veterinary surgeons.—*Brit. Med. Jour.*

Treatment of Ivy Poisoning.—Dr. H. Hahn writes to the *Therapeutic Gazette* that the following prescription has given him good results in the treatment of the dermatitis caused by rhus toxicodendron:

℞.	Acid carbolic,	ʒj.
	Liq. ammon. caust.,	ʒss.
	Ol. olivæ,	ʒiij.

M. Sig.—Compresses to be moistened and applied once in two hours to the affected parts. If the eruption be very acute and painful, cover the compresses with an ice-bag.—*Practitioner and News.*

Iodide of Sodium.—Iodide of sodium is considered by Dr. Richardson as a valuable substitute for, or adjunct to, iodide of potassium. In chronic eczema and painful rheumatic affections it often answers well when iodide of potassium does not agree with the digestion. Combined with arsenic it is useful in lepra and psoriasis. Externally applied, in cases of indolent ulcer, chronic syphilitic sores, and offensive discharges from the nostrils, it acts as a good antiseptic. The following is given as a useful formula for the purpose: Sodium iodide, ʒss; tincture of myrrh, ʒi; rectified spirit, ʒii; distilled water, ʒvi. To make a solution of eight ounces. Used in the form of fine spray from Seigle's steam spray-inhaler, Dr. Richardson found it of the greatest service in a case of syphilitic ulceration of the fauces.—*The Provincial Medical Journal*, March 1, 1887.

Chloral Eruption.—Dr. Barbillion has described a variety of erythema appearing in patients under the influence of chloral, upon the administration of alcohol. The chloral eruption was first recognized by Jastrowitz in 1869, and has since been met with by numerous observers. The point to which Dr. Barbillion calls attention is the almost mathematical regularity with which the exanthem appears under certain circumstances. Given a child of from four to eight years of age, who is taking from one-half to one drachm of chloral daily in repeated small doses, the administration of alcohol in the form of wine or spirit mixture will cause the appearance of the rash in from fifteen to thirty minutes.—*The Lancet.*

Bad Breath.—Dr. Frank H. Gardiner believes that decaying particles in the mouth as far back as the pharynx vault taint the breath exhaled very little, if at all. Mouth-breathers have a bad breath when the tonsils are enlarged, or when cheesy masses exist in the tonsillary mucous folds. Certain gastric derangements taint the breath only when gases are eructated through the mouth. The principal cause of bad breath is decomposition in the intestinal canal, the retention of fecal matters in the transverse and descending colon, and the absorption of gases into the circulation, finally exhaled by the lungs. Catarrh (nasal, pharyngeal, laryngeal, or bronchial) causes bad breath. Medi-

cines or aliments which undergo chemical changes below the œsophagus may, by rapid absorption through the stomach-walls, or immediately below, give to the breath the characteristic odor. This bad breath is often a source of serious annoyance to patients, and the fact that it has more than a local cause is too often ignored by the physician who, therefore, fails to cure it.—*Dental Review.*

Abdominal Support During Pregnancy. Advantages of.—A writer in the *Provincial Med. Journal* says: "I always advise patients in a pregnant condition to leave off their corsets (from about the fourth month onward, should I see them at that time), and having supplied the want of a corset by a suitable bodice, to wear a supporting belt with elastic sides, so arranged as to exercise a comfortable pressure, from *below*, on the muscles, and fitted with sapes or straps to relax the pressure as the uterus enlarges. In every case in which I have recommended this to be done, and where my directions were followed, the patient not only expressed herself as feeling far more comfortable, but I have remarked that the subsequent labor was of much shorter duration than usual, owing, I believe, to the support afforded in time to the abdominal muscles, and which, by husbanding their tone and strength, enabled them to assist the uterus, in its efforts of expulsion, in a marked degree.

When engaged to attend primiparæ, I also direct the bandage to be left off at night, and the abdomen well rubbed with lard at bedtime. When this treatment is followed in primiparæ, I find there is little or no trace of the "linea albicantia", to be discovered after the patient recovers from the lying-in, and the abdomen also resumes its natural appearance, which the patient as a rule is the first to remark.

Treatment of Catarrhal Jaundice.—Dr. Gluzinski, writing in a Polish journal, states that in cases of catarrhal jaundice he has found excellent results follow the treatment recommended by Krull,—viz., the repeated injection into the bowel of large quantities of cold water. This increases the peristaltic action of the intestines, and removes any mechanical obstacle to the flow of bile. Again, as has been shown by Röhrig and Mosler, who injected large quantities of cold water into dogs, the bile is thus rendered both more liquid and more abundant, so that it more easily overcomes any obstruction. At first water at 59° F. is injected into the bowel until the patient complains of a feeling of distention in the abdomen. He is then made to retain it as long as possible. Most patients manage to retain two litres for from a quarter to a half an hour. The next day the enema is repeated, but with water about 4° higher. The temperature is again raised on each succeeding day, but when 72° have been reach no further increase is made. The reason of the increase is that the repeated introduction of cold water is apt to irritate the mucous membrane of the bowel, although four or five enemata are sufficient to produce the desired effect. The increase of the biliary secretion may be judged by the color of the fæces. Of course, the diet is attended to in order to prevent a recurrence of the affection.—*Lancet*, April 23, 1887.

Arsenic and Lithia in Diabetes.—At a meeting of the Paris Société Thérapeutique (February 23d,) Dr. Martineau recommended the following treatment, with which, he said, he had cured sixty-seven out of seventy patients suffering from arthritic diabetes:

Carbonate of lithium	3 grains.
Arseniate of sodium	$\frac{1}{10}$ grain.
Carbonic acid water	2 pints.

Effect the solution under pressure. The effervescing liquid is to be drunk at meals, mixed with claret, and the foregoing dose is to last for at least three meals, being taken at the two principal meals of the day, customary in Paris. No change of diet is necessary. Dr. Martineau's fellow members—Dr. Dujardin-Beaumetz among them—were somewhat sceptical about the value of the treatment, but it is so simple and

easy that it can be given a trial when the patient is not dangerously ill.—*Therapeutic Gazette.*

An Alleged Instance of Remarkable Fecundity. — A correspondent sends us an extract from a book giving the history of a journey to Saragossa, Barcelona, and Valencia, in the year 1585, by Philip II, of Spain. The book was written by Henrique Cock, who accompanied Philip as his private secretary. On page 248 the following statements are to be found: At the age of eleven years, Margarita Goncalez, whose father was a Biscayian, and whose mother was French, was married to her first husband, who was forty years old. By him she had seventy-eight boys and seven girls. He died thirteen years after the marriage, and, after having remained a widow two years, the woman married again. By her second husband, Thomas Ochoa, she had sixty-six boys and seven girls. These children were born in Valencia, between the fifteenth and thirty-fifth years of the mother's age, and at the time when the account was written she was 35 years old and pregnant again. Of the children, forty-seven by the first husband and fifty-two by the second were baptized; the other births were still or premature. There were thirty-three confinements in all.—*New York Medical Journal.*

Salicylic Acid in Chancroid.—The above drug has been recommended by numerous authors in the treatment of chancroid. The sore should be first washed with some antiseptic fluid, and then dusted with finely pulverized salicylic acid. This should be repeated twice a day for four or five days, when the sore will usually have been converted into a simple ulcer. Then nothing more is required than the employment of say boracic acid lotion, under which it rapidly heals. This plan causes little pain or inconvenience of any kind, and can be carried out by the patient himself.—*Canada Lancet.*

The Relative Smartness of Doctors' Children.—Galton has pointed out some very curious facts concerning the children of professional men. He found, from a study of the heredity of the members of some of the largest scientific societies of London, that the legal profession presented the most eminent men and the fewest idiots. The medical profession came next; and lastly clergymen, who produced the smallest number of eminent men and the largest number of idiots and feeble-minded. The lawyers gave origin to six times as many eminent men as the clergy. The clergy gave origin to six times as many idiots and feeble-minded as the lawyers.—*Med. Rec.*

An Ointment for Obstinate Acne. —The following is known as Wilkinson's ointment:

℞.—Naphthol	3 2½
Sulphur. præcipitat.	3 12½
Vaseline or lanolina,	
Potassium soap	āā 3 6½

M. ft. unguentum.
Sig.—Local use daily.
—*Revue de Thérapeutique*, March 15, 1887.—*Medical News.*

In the Broncho-Pneumonia of children the treatment in Paris is ipecacuanha to the extent of vomiting the patient occasionally, the use of the bromide of potassium to quiet the cough, and the free use of alcohol. No opium is given. Mild forms of counter-irritation are applied to the chest. In croupous-pneumonia the treatment is expectant, and alcohol is used, though Professor Jaccoud gives tartarized antimony in the early stages when the patient is robust.—*Paris Correspondent of the Chicago Med. Jour.*

Peptone Suppositories.—Sauter prepares these suppositories with cacao butter, each containing twenty-five grains of peptone; they are mixed, and kept cold to prevent the fat from becoming rancid. In cases where patients cannot be nourished in the normal manner, they serve an excellent purpose, fifteen grains of dried peptone equalling two and one-half drachms of meat in nutritive value. Children may be given one suppository

four times daily; grown persons, two, three or four times daily. The suppository should be lubricated with olive-oil, and the rectum previously cleansed by an enema.—*Therapeutic Gazette.*

Formula for Oil of Male Fern.—

℞.—Ol. filicis mar.	♏45.
Tinct. vanillæ	♏45.
Syrup. terebinth	ʒ 6ɬ.
Gummi arab. pulver	gr. 30.
Aquæ destillat.	ʒ6ɬ.—M.

This should be taken at one dose, with an equal amount of milk. Castor oil should be given several hours afterward. *Journal de Médecine*, April 17, 1887.—*Med. News.*

Wound of the Heart.—A man named Mulcahy was shot recently in Cork, and died nine hours after removal to the infirmary. It appears that the bullet passed through the pericardium, the right ventricle of the heart, the left auricle, and again through the pericardium to the front of the spinal column. The interesting point of the case is that the man lived for nine hours after the infliction of such a wound.—*Brit. Med. Journal.*

An Injection for Fœtid Leucorrhœa.—The *Union Médicale* gives the following formula:

Potassium chlorate	13 parts.
Wine of opium	10 "
Tar water	300 "

Two or three tablespoonfuls are to be added to a quart of warm water as a vaginal injection and lotion.

The Lactocrite.—The lactocrite, a new apparatus for testing milk, particularly with regard to its value for butter, is the invention of de Laval, also the inventor of the well-known centifugal separator, which bears his name, and is designed to be used with the latter. The milk is first heated with its own bulk of strong acetic acid, to which five per cent. of strong sulphuric acid has been added. This treatment, continued for seven or eight minutes, suffices to set free the fat of the milk from its emulsionized state. A glass tube with a narrow neck, properly graduated, is then filled with the milk, placed in a suitable holder in a disk which is attached to the centrifugal separator, and the latter set in operation. A complete separation of the fat is then effected in the narrow neck of the tube, where the amount is read off. The instrument is designed to enable cremeries using the centrifugal to test the quality of each patron's milk; and it appears to be well adapted to this purpose. Several tests of its accuracy have been made of late. Sexhlet, in the *Milch Zeitung* (xvi. 14), reports that he obtained by it results agreeing within 0.1 per cent. with those of his aërometric method. Sebelien (*Landw. Vers. Stat.*, xxxiii. 405) finds that, if all the directions are strictly observed, the results do not vary at most more than 0.1 per cent., and usually not over 0.5 per cent., from those of gravimetric analysis, but notes that these directions must be carefully followed. Faber (*Analyst*, xii. 6) obtained about the same results. Blythe (*Ibid.*, xii. 34) found in eleven trials a maximum error of 0.14 per cent., and an average error of 0.05 per cent.—*Science.*

Over-distention of the Right Ventricle Relieved by Leeches.—Dr. F. C. Shattuck, of Boston, reports, among others, the following interesting case:

M., aged eleven years, entered the House of Good Samaritan, May 17, 1886, for mitral disease, the result of rheumatic endocarditis the previous winter. September 10th, she was sent to the Convalescent Home connected with the institution, and stayed till November 20th, when she came back. Under absolute rest, careful feeding, and digitalis, she improved for a time, but grew worse again.

January 31, 1887. She was vomiting everything she took; there was marked cyanosis, and some ascites, anasarca, and hydrothorax; the jugulars and the liver were pulsating distinctively; the pulse 129–130; the daily amount of urine had fallen to ʒ2–3. Six Leeches were

ordered over the liver, and with subsequent bleeding, the amount of blood lost was estimated at ℥8. Immediate relief followed; the vomiting ceased, she had a good night, the next day the venous pulsation was scarcely to be seen, and she took a good breakfast with relish. The amount of urine rose to 10 ounces on February 1st, to 9 ounces on February 2d, 10½ ounces on February 3d, 123 ounces on February 4th, 60 ounces on February 5th.

The pulse fell on the 3d to 90. It is only fair to state that on the 2d, she was ordered tincture of strophanthus ♏ij. t. i. d. I do not doubt that this drug contributed to the diuresis and continued improvement, but from my experience with other cases I am persuaded that without the previous leeching it would have been useless. Since then I have pushed the strophanthus up to ♏xi. t. i. d., the pulse remaining at 108 all the time. There was an interval of a fortnight between the time the strophanthus was omitted and resumed.

The child is now up and dressed all day, and is steadily improving in weight and strength. I believe that her life was saved by the leeches.—*Boston Med. and Surg. Journal*, April 28, 1887.

The Induction of Labor by Electricity.—The report of seven cases by Brühl in the *Archiv für Gynäkologie*, B. xxx. H. 1, confirms and emphasizes the unfavorable opinion we had occasion to express some time ago in regard to the employment of electricity to induce premature labor. In each case the application of a galvanic current for a number of days successively resulted in uniform failure. Nothing more was accomplished than the dilatation of the os to the size of a dollar; so that, in order to stimulate the uterine muscle to sufficiently energetic action to complete the labor, other means had to be employed.

Not only was the galvanic current insufficient, but it was also decidedly deleterious in its action. In one case, the skin over the fundus uteri was injured by the anode, while in two cases there was a purulent vaginitis as the result of the application of the cathode to the cervix, although careful antiseptic precautions were observed.

The prolonged application of the electricity, moreover, deadened the sensibility of the uterus in a remarkable manner, so that when it became necessary to resort to more powerful stimuli, they met with but a sluggish response. But still more serious was the fœtal mortality, for, of the seven children, five were stillborn, three from prolapse of the umbilical cord, due to the lively movements of the fœtus excited by the electrical current.

Electricity by no means answers the description of the best agent for inducing labor, one that will with certainty cause the expulsion of the fœtus within a reasonable time without danger to the mother or child, but in view of the fact that it will dilate the cervical canal up to a certain point, it might possibly be used, as suggested by Lusk, as a substitute for tents. On the whole, however, we are disposed to echo Dr. Brühl's conclusion that he cannot recommend it.—*Med. News.*

Practical Results in Restricting Diphtheria.—At a meeting of the State Medical Society of Michigan held at Lansing, May 13, 1887, Dr. Henry Baker, the Secretary of the State Board of Health, presented the following compilation of reports by local health officers in Michigan for the year 1886, which exhibits the results of isolation and disinfection in outbreaks of diphtheria in that State.

In the 102 outbreaks where isolation or disinfection or both were neglected, the average *cases* per outbreak were a little over 16, and the average *deaths* were 3.23; while in the 116 outbreaks in which isolation and disinfection were both enforced, the average *cases* per outbreak were 2.86 and the average *deaths* were 66; indicating a saving of over 13 cases, and 2.57 deaths per outbreak, or 1,545 cases and 298 deaths during the year, by isolation and disinfection in the 116 outbreaks, compared with those in which nothing was done.

Medical Items.

The death of Professor Vulpian, of Paris, is announced.

The late Sir Thomas Watson received, for many years, $1,000 annually from the sales of his book.

Dr. J. Kirk Duncanson, of Scotland, has accepted the office of vice-president of the Section of Otology of the Ninth International Medical Congress.

The second annual meeting of the Association of American Physicians will be held in the Army Museum building at Washington, D. C., June 2 and 3, 1887.

The only solution capable of rendering the fingers free from micro-organisms, according to Forster, of Amsterdam, is the 1 to 1,000 solution of corrosive sublimate.

Dr. Wilson Fox, Physician-in-ordinary to the Queen and Holme Professor of Clinical Medicine at University College, London, died on May 3rd at the age of 57 years.

The Committee on Arrangements announce that proper arrangements have been made to accommodate the various Sections of the International Congress in Washington.

The amount of alcohol or distilled spirits used in the preparation of medicine in this country annually is about seven million gallons, or about 10 per cent. of the whole amount produced.—*Med. Rec.*

The New York Academy of Medicine has recently received a legacy of $70,000 from the executor of the estate of Mrs. C. B. Hosack, widow of the late Dr, A. E. Hosack of New York, and a donation of $5,000 from Mr. Jacob Meyer of New York.

The mortality of the Globe, as given by a Continental journalist who has made the computation, is as follows: Per minute, 67; per diem, 97,790; and per annum, 35,639,835; whereas the births are 36,792,000 per annum, 100,000 per diem, and 70 per minute.

Piperonal, a derivative of piperine, has been brought into notice by Dr. Frigoni as an antipyretic. It is given in doses of twelve grains every three hours. In larger doses it causes nausea, but no serious effects. It is insoluble in cold water, but soluble in alcohol. Its principal value is as an antiseptic.

The Fair and Festival recently held at Oratoria Hall, in this city, in behalf of St. Lukeland, the Summer Cottage Convalescent Hospital, located at Catonsville, Md., six miles from Baltimore, realized the net sum of $3500. This is one of the most deserving of any of Baltimore's numerous charities. It owes its existence to the Hospital Relief Association which has already done so much for the relief of the invalid population of this city. The Home for Incurables, now a handsomely endowed and successfully managed institution, was inuagurated less than five years ago by the Hospital Relief Association.

At the Commencement of the New York College of Physicians and Surgeons, held on May 12th, the Cartwright Prize of $500 was awarded to Dr. B. F. Curtis, of New York, for his essay on Injuries to the Abdomen and Rupture of the Intestines. The Prize Committee also made honorable mention of the essay of Dr. H. A. Hare, of Philadelphia, on the Action of Antifebrin, Salicylic Acid, and Carbolic Acid on Normal and Abnormal Bodily Temperature.

The next meeting of the Medical Editors' Association will be held in Chicago on Monday evening preceding the meeting of the American Medical Association. The President, Dr. Shoemaker, will deliver an address: "Some of the Present Abuses of Medical Literature." It is desirable that all medical editors who can shall attend, as the organization is a permanent one and largely social. Dr. T. L. Gray, of Chicago, is Chairman of the Committee of Arrangements.

Members of the press who expect to be present should sends their names as early as possible to the Secretary, Dr. William Porter, 3137 Lucas Avenue, St. Louis. Exchanges please copy.

Dr. Rusby of Columbia College delivered a very interesting lecture before the Clinical Society of Maryland, May 20, on the subject of Medical Plants, New and Old of South America. The speaker described in graphic terms the scenery of the Andes, and its profuse flora, suggesting the possibility of the discovery of very many useful drugs. He spoke of the cultivation of the coca plant, the care required in its raising, the precautions which were necessary to prevent its destruction by floods and insects, its free use by the natives, who attribute to it wonderful virtures which the doctor vouches for, and explained the fact that such results were not obtained from its use in this country, on the ground that the leaves must be used in their fresh condition, or at least must have their alkaloids extracted when fresh. The only alkaloid which is known in this country is cocaine, which does not possess the peculiar invigorating property of the fresh leaves at all, this latter effect being produced by an entirely different alkaloid which is destroyed by transportation, or even by keeping the leaves for ten days.

It would seem that the Indians used cinchona long before the Spaniards, the alleged discoverers; they do not use our distinctions of yellow, red, etc., in classifying the bark. Dr. Rusby investigated many new plants testing for alkaloids, collecting evidence as to their action and experimenting with them upon himself. He mentioned as worthy of notice koto for dysentery, matico a diuretic, and richi which is said to have some solvent power over stone in the bladder.

Original Articles.

TUBERCULOUS HEREDITY AND ITS PROPHYLACTIC TREATMENT.*

BY FRANK DONALDSON, M.D., OF BALTIMORE.

That there exists an hereditary predisposition to pulmonary tuberculosis is universally admitted. As far back as the time of Hippocrates it was recognized that such was the case. Of the 210 physicians interrogated by the State Board of Health of Massachusetts only one denied that consumption was caused or promoted by hereditary transmission.

Dr. R. Thompson gives an account of eighty families of consumptive parentage, of which there were born 385 children, of whom 194 became phthisical and 37 died in childhood, leaving only 154 exempt. Every one is familiar with instances of the development of phthisis from hereditary influence. Life insurance companies daily reject applications where there have been evidences of such proclivity. From the statistics collected by Fuller, Pollock, Walshe and Theo. Williams, it is fair to state that 30 per cent. of all the cases met with are of the hereditary type. If grandparents' records be included, the percentage will run up to 48 per cent.

It has been found that the hereditary influence of the mother is far greater than that coming through the father, as might naturally be supposed to be the case as the father's impression is made only at conception, whereas that of the mother commences with the ovum and continues through uterine gestation.

Again, family predisposition is much more commonly met with among women than among men, the proportion being 59 per cent. of women to 37 of men. Statistical tables show that in hereditary males the development of phthisis is earlier, the average age being 24 64-100 years, whereas in acquired phthisis the average age of the attack is 32 years. Hereditary influence is stronger for the immediate than from remote ancestry, except in the rare instances of atavism.

Pathology and Ætiology of Phthisis.—For the elucidation of what constitutes this heredity we must, however hastily, look into the modern views of the general pathology of tuberculosis. Indeed, we cannot over estimate the importance of this ætiological question in the study of every point connected with this disease.

Lænnec's genius, in addition to his great discovery of auscultation, gave us the doctrine of the unity of phthisis. He recognized the fact that, notwithstanding the apparently different anatomical conditions found in the pathological investigations of consumption, from Bayle's granulations to the cheesy masses and scrofulous glands, that they were all varying manifestations of one disease. Men who followed him, especially Virchow, disputed this view and pointed to the histological points of difference as irreconcilable to their being one and the same disease. Virchow showed that caseation could result from ordinary inflammation, which was not a tuberculosis process.

They mistook tubercle, the product of disease, for tuberculosis, the disease process itself. They did not reach a conclusion which harmonized their views. The specific nature of tubercle believed in by Laennec and others was first demonstrated pathologically by Buhl in 1857, when he pointed out that an outbreak of tuberculosis was almost always attributable to the previous existence of caseous matter somewhere in the body.

The next step in advance was made in 1865 by Villemin who demonstrated that caseous matter introduced by inoculation into an healthy animal produced tuberculosis, and that, therefore, the tubercular virus dwelt in caseated products. Numerous experiments followed by Lebert, Wilson Fox and Burden Sanderson, and although Villemin's results were confirmed, yet it was claimed that inoculations of muscle, pus and other matters, even inert in-organic substances, and setons and threads would produce like results.

It may be well here to state that further experiments, by thoroughly compe-

*Abstract of the President's address read before the American Climatological Association, May 31, 1887.

tent observers have shown that these conclusions from inoculations with non-tubercular matter were fallacious whenever due precautions were taken to use perfectly clean instruments and vessels, and to exclude all tubercular animals from the neighborhood of those under operations. When such was the case, they did not produce tuberculosis. In drawing their conclusions from the results of the inoculation of pus from pyæmic patients there is an obvious danger of a fallacy creeping in forasmuch as the patient in any given case may already have been the subject of tubercular disease.

Cohnheim, who with Frankel, instituted some of these experiments with non-tubercular substances, for sometime questioned the accuracy of Villemin's results, but afterwards he became a firm believer in the doctrine that only tubercular matter could by inoculation produce tubercular disease. The fact is, however, that these experiments made before Koch's discovery are of little value. It was natural that there should be such incredulity in regard to Villemin's experiments. Klebs and Cohnheim boldly defined tuberculosis as an infectious specific disease. It is unnecessary before this audience to cite the numerous experimental researches which amply confirmed Villemin's views and finally culminated in Baumgarten's and Koch's discovery of the tubercle-bacillus, a pathogenic micro-organism which they claimed was the producing cause of tuberculosis and the potent factor in the transmission of the disease by inoculation or by contagion. Baumgarten pointed out the bacillus, but he did not advise a method of demonstrating it. Koch by special process of staining showed the presence of the microbe. They claimed that this pathogenic agent of tuberculosis was a specific bacillus, differing from almost all other bacteria in size, form and in its chemical behavior with staining substances. They reëstablished on a sure foundation Lænnec's doctrine of the unity of phthisis.

Five years have elapsed since they isolated the contagium of tuberculosis. A great many observers have devoted their attention to the relation of the tubercular bacillus to human tuberculosis. The testimony of nearly all is confirmatory of the statement of Koch, that the tubercular deposits in human tuberculosis contain the now well-known bacilli, distinguished by their morphology and chemical reactions from other kinds of bacilli.

The important question is, can tubercular disease be produced by the inoculation of anything but matter containing tubercle bacilli.

I must not take up the time of the Association longer than simply to mention some of the experiments instituted to test this question. Lawson Williams reports sixteen inoculations with putrid muscular fibre with negative results. Dr. Watson Cheyne experimented by introducing vaccine lymph, pyæmic pus and various inorganic materials into the abdominal cavity of animals; he also inserted setons. He did not succeed in a single instance in producing tuberculosis. Salomonsen introduced a variety of substances of non-tubercular nature into the anterior chamber of the eye with negative results. Baumgarten inoculated with a great variety of animal substances such as carcinoma, fungi, cheesy matter from different sources, with negative results. Cohnheim and Frankel's experiments with non-tubercular substances when repeated in Kiel and Bresslau gave no cases of tuberculosis. Salomensen repeated his experiments on an extensive scale with non-tubercular materials, chiefly with the products of inflammation, with absolutely negative results. Cohnheim before he died became an ardent supporter of the view that tuberculosis was produced only by a specific organism—the tubercle bacillus.

Many, at first, were of the opinion that the tubercle bacillus would not settle and grow in healthy living bodies, but only in pathologically altered tissues. Hence they inferred that the bacillus was not the cause of the phthisis but followed it. While it is true that the bacillus takes hold better when tissues are weakened by disease, yet there

is abundant evidence that as healthy animals when inoculated succomb to the disease, so human subjects rapidly yield to the bacillary poison as seen in acute miliary tuberculosis when previously they had been in perfect health.—It has been suggested that perhaps some other pathogenic substance adhered to the inoculated material and the actual infective virus might reside in it and not in the bacilli. It has been now proven over and over again that unless the bacilli are present there is no inoculation. Some deny that it is primarily a mycotic process. They assert that first of all there are in the lung tissue chronic infiltrations, innocuous and non-specific, which afford to the microbe, incapable of development in the normal lungs of healthy individuals, the possibility of settlement and propagation and, thus, benign lung affections are converted into the virulently fatal process of strictly tubercular phthisis. This sceptical spirit is dying out, and Koch's bacillus is now believed by many, who once doubted, to be the *causa causans* of tuberculosis and its manifold lesions. The search for its presence in the sputa, looked upon as a craze not so long ago, is already taking a prominent and proper place as supplemental and trustworthy help to diagnosis and must be so employed.

Tubercle bacillus is never present in the sputa of non-tubercular disease and observations have shown that it is extremely rare for bacilli to be present in the lungs and absent from the sputum.

By his discovery of this microbe as peculiar to this disease and which can almost constantly be found in the expectoration of phthisical patients, Koch has made the work of sputum examination as incumbent upon physicians and as important as that of the use of auscultation and percussion. Greater certainty can thereby often be attained, for we are all familiar with the fact that the physical signs of early phthisis are frequently equivocal and undecided, varying from completely negative to feebly affirmativediagnosis. Indeed in many cases the most accomplished auscultators may be in doubt. Although in the early stages of bacilliary phthisis the temperature is generally raised, yet the presence of bacilli is not necessarily associated with fever. We all know that caseous softening and breaking down of lung may exist without cough. You may have tuberculosis of lung with but little loss of body weight, whereas the presence of bacilli in the sputa is conclusive.

Koch has found in the phthisical cavities an organism called micrococcus tetsagoness which is pathogenic for many of the lower animals and which he thinks may aid in the destructive processes in phthisical lungs. The micro-organisms of suppuration such as the stafhyloccus pyogenes aureanus or albus, are frequently found in the phthisical cavities; there presence is to be regarded as secondary and inconstant, but when present they may doubtless add in the changes in the lungs.

It may be safely said that all attempts to discredit the existence of these bacilli, or to assign to them inorganic properties have entirely failed. We must now accept this particular micro-organism as a necessary factor in the causation of tuberculosis. The bacilli are now known to be present in the pulmonary cavities of cases of true tubercular phthisis. They have been found in the lesion of artificial tuberculosis of animals and in acute miliary tuberculosis and phthisis of animals and in acute miliary tuberculosis and phthisis in the human subject. They are more abundant in artificial tuberculosis and less abundant in tuberculous diseases, which includes not only acute miliary tuberculosis and phthisis, but also scrofulous glandular and joint affections and even lupus.

Spores. Koch insisted that the spores are extremely resistant bodies. He found that in certain cases caseous matter apparently containing no bacilli was still infective, and when inoculated set up tuberculosis with a copious development of bacilli.

In such cases the caseous matter contained the spores, *i. e.*, potential bacilli, which only required a suitable nidus for their evolution into mature bacilli.

This may afford an explanation of the absence of the bacilli in many nodules.

Contagion. We have it demonstrated that tuberculosis is a parasitic disease. We are now forced by pathological investigations to believe Laennec's view of the unity of the lesions of phthisis. This including all its manifestations, acute and chronic, tubercle, caseous pneumonia, miliary tuberculosis and fibroid phthisis, the tubercle bacillus being at the bottom and origin of all these apparently different pathological changes, whether produced by inoculation or by spontaneous development. Science has reached the point of not only showing the existence of the microbe but many points of its natural history. The microscope cannot create objects, it only reveals them. By its aid the behaviour of the bacilli is watched, and its effects examined. It causes the nodules known as tubercle and local inflammatory points. It is in nature an epiphyte for where it lodges it sets up local disease and spreads its influence and grows. It soon has the putrefactive organisms with the aid of the physical conditions of heat and moisture to assist in caseation. We cannot tell why it thrives in some persons and not in others, why it increases at one time and not at another. But we cannot longer question its contagiousness in the fact that it is demonstrated that it is communicated from one being

From clinical observations many practitioners believed in the contagious nature of pulmonary phthisis long before these recent discoveries were known. So many instances were met with where individuals, especially wives and husbands, apparently contracted the disease from each other. That many were exposed and did not take the disease ought not to militate against the belief of its being contagious, for we are all familiar with the fact that this is true of all universally acknowledged infectious diseases including the exanthematous fevers. There are different methods of infection in different diseases. Then again the susceptibility of individuals varies so much, some rarely taking any contagious disease even after much exposure, others, on the contrary, on the slightest contact, readily taking infection. Theories and probabilities have now disappeared to give way to certainty. Inoculation and reproduction of the infecting principle is shown by the mode in which the disease begins in most of the cases as a local disease in the cells. of the smallest bronchi, or elsewhere in one or two circumscribed spots only, in the apex of the lungs a favorite lodging place. From these points it extends gradually to the periphery. When the ulceration takes place the air in respiration passing over conveys it elsewhere, but it is primarily a local disease,—an inoculation, just as if it had been inserted with a hypodermic syringe. It does infect the whole organism. The ordinary method is through the dried sputa containing the bacilli—which may remain dormant for a long time without losing their vitality or asserting their power of evil.

Fortunately the microbe does not grow or spread outside of living bodies, for its multiplication requires a constant and uniformly warm temperature of from 85°F. to 105°. As parasites they preserve their virulence for a long time when dry and pulverized. As there is no such thing as spontaneous generation they must come from some living animal source. We cannot wonder that they are found in large cities ready to assert their destructive powers wherever they meet the proper soil. The sputum is thrown out in the street, in the dwelling and is taken up by the winds and inhaled into our lungs. They or their spores lodge in the air passages, the lungs or larynx the nose, the pharynx or in the deeper portions. Experiments have shown that solutions containing bacilli used in a spray have been inhaled and produced consumption in animals. The intestinal canal may be infected from swallowing the infecting material—milk and the meat of diseased cows may infect human bodies, although ordinarily, they are digested in passing through the intestines.

(*To be continued.*)

NOTE ON THE TREATMENT OF AMENORRHŒA WITH PERMANGANATE OF POTASH.*

BY THOMAS A. ASHBY, M.D., OF BALTIMORE.

Since attention was first called to the therapeutic value of permanganate of potash in amenorrhœa and other menstrual disturbances by Drs. Ringer and Merrell, I have had occasion to employ this drug in a number of cases of amenorrhœa with results so satisfactory that I have come to regard it as one of the most to reliable emmenagogues we possess in a definite class of cases. My own experience has been so accurately foreshadowed by Dr. Fordyce Barker and other observers who have written on this subject that I shall not attempt its lengthy discussion. My simple purpose is to confirm the facts so carefully observed by others with a report of a few cases, selected from a number of cases similarly treated, as examples of the conditions in which the permanganate of potash is of most positive value.

In the treatment of amenorrhœa by drugs the well-known types of the conditions which may account for the absence or scantiness of the periodic flow must be recognized. There are no drugs known to science which will establish a monthly flow when the organs so necessary to menstruation are totally absent or so feebly developed as to possess no power of functioning. Emmenagogues certainly can prove of no value under such circumstances and it will simply be a wild waste of time to place any confidence in their employment. The most important preliminary duty in the treatment of amenorrhœa is to determine the underlying cause. We must first regard amenorrhœa as a mere symptom of a functional disturbance of the generative apparatus and with this key attempt to unlock the door which conceals from view the causative influences at work in the production of the symptoms under discussion. In many cases a physical examination of the pelvic organs will be required to account for the total absence or scantiness of the periodic flow. It seems to me that this method should be employed in every case where the administration of drugs is proposed, except in the cases of young girls in whom the function is probably retarded by slow development or dependent upon conditions of anæmia or chlorosis. In this latter class of patients the preliminary employment of iron or manganese is admissible until we have fully tried their effects with negative results. Physical examination is then the only rational method of determining the essential cause of the retarded or feeble menstrual function.

It is not my purpose to discuss the treatment of the various forms of amenorrhœa, but to confine my remarks strictly to the indications calling for the employment of permanganate of potash in this condition. I can possibly make my thoughts clearer by the relation of cases which illustrate the points I wish to present.

I have selected three cases which present three different types of amenorrhœa. Each case offers an explanation of a functional disturbance dependent upon entirely different causes in which the permanganate of potash acted most satisfactorily in correcting the underlying trouble and in establishing a normal periodic flow.

CASE I.—Miss A. B., single, aged 28 years, has suffered for eight years past with uterine disease. At the beginning of her menstrual life she experienced a scanty flow, accompanied with dysmenorrhœa. She was treated by a distinguished gynæcologist in a distant city for this condition, both locally and constitutionally. At one time the operation of posterior section was proposed by her medical attendant, but was refused by herself and friends. Her health gradually improved under a change of location, diet and habits of living. For several years she was under no special treatment, but during all this time her menses were scanty, irregular and invariably accom-

*Read before the Baltimore Gynæcological and Obstretrical Society, May 10, 1887.

panied with pain. During menstruation she was almost invariably confined to her bed, suffering with pains and cramps in the pelvis and lower limbs, with violent flushes of blood to her head, associated with headache and facial neuralgia. During this time nausea and vomiting were invariably present and her appetite was totally gone. The menstrual flow lasted from three to six days. The amount of blood lost was about one-third the normal flow. After the subsidence of menstruation her general health during the *inter-regnum* was only fairly good. She was plump, ruddy and well-nourished, but complained constantly of weakness, general languor and dizziness. Her appetite was seldom vigorous; her secretions were seldom perfectly regular and normal. Whilst not positively sick, except during menstruation, she was seldom positively well. She is a young lady of uncommon grace of manner and intellect, small in statue, but pretty in form and features. Her intellectual accomplishments are far above the average. As previously stated she had several years prior to the date of my own observations been treated locally for uterine disease. This treatment had brought great prejudice in her mind against this method. She preferred to suffer, as she expressed it, rather than undergo any further treatment by local examination. Drugs of various kinds had been employed with almost negative results. About this time my attention was called to the value of permanganate of potash by the well known communication of Drs. Ringer and Merrell. I at once proposed this drug. In fact I secured for her the two grain gelatine coated pills and gave them to her. She began taking one thrice daily and continued their use for some weeks. The result was so satisfactory that she has continued them from time to time as the occasion requires with more decided benefit than ever before obtained from any form of medication used. The periodic flow became more profuse, the pain less severe and those symptoms referable to a disturbance of this function have in great measure disappeared. I think I am warranted in stating that the drug has been of great service and has accomplished for her what had not been obtained from any other emmenagogue.

Case II.—Mrs. R., aged 26, married six years, sterile, has always enjoyed good health, but has never menstruated longer than one or two days and has had a very scanty flow. Menses come on regular each month, but during the time she suffers with flushes of blood to head and face and with giddiness. She is extremely anxious to bear children and with this object in view came under treatment for the relief of her sterility. Physical examination revealed a small uterus, slightly anteflexed and somewhat depressed in the pelvis. The vaginal cervix is small and conical. The canal readily admits the sound to the depth of one and three-fourth inches. There is some slight catarrh of cervix but not enough to account for sterility. The ovaries could not be accurately made out by examination. The only explanation I could find for the condition of scanty menstrual flow and associated sterility was the unusually small but well-formed uterus. I prescribed permanganate of potash in one grain doses, gelatine coated pills, administered thrice daily. These were taken as ordered. The menstrual flow came on two weeks later at the regular epoch without pain and more profusely and comfortably than the patient had ever experienced. The flow lasted four days and the amount blood lost was estimated at three times the quantity of any previous period. The patient had been advised previously to notice all of these facts. She came to see me after the period had subsided, her face animated and feelings gleeful over the result. She was greatly encouraged by the result and I confess that I somewhat shared her feelings. She now continues to take these one grain pills as follows: One pill once daily during the inter-menstrual period, except the week antedating the flow during which time and during the time of flow she takes one grain thrice daily. The result has so far been eminently satisfactory. It is too soon to say whether the establishment of a regular monthly flow will have any effect

upon her sterile condition. This problem time must solve. I simply relate this case to show the value of the permanganate of potash as an emmenagogue.

Case III.—Miss W., aged 19, single, not well developed mentally or physically for her age, has never menstruated properly. The flow is irregular, scanty, painful and pale in color. She also suffers with constipation and general sluggishness of her portal circulation. This patient had been examined *per vaginam* before she came under my observation and the operation of divulsion had been advised for the relief of stenosis of the cervix. I found the uterus small, anteflexed, and somewhat prolapsed. The vaginal cervix was small and conical, but the cervical canal was patulous enough to allow the scanty blood thrown off during menstruation to escape. I did not think the operation of divulsion advisable until other methods of relief had been tried. I advised the use of hot water vaginal enemata twice daily, and suggested that the habits and occupation of the patient be varied. I also prescribed permanganate of potash in one grain doses gelatine coated pills thrice daily. These were taken as ordered. The next menstrual flow came on more profusely and satisfactorily than previous flows had been. At the end of the period she was instructed to diminish the dose to one grain once a day, and again to repeat the three doses the week preceding and during the flow. She has informed me that this method has given her much relief, that the flow is freer and brighter in color, accompanied with less pain and less bodily distress generally. It is too soon as yet to draw positive conclusions from the data furnished by this case but I think I can frankly accord to the drug a positively good effect and that I am warranted in saying that it is a uterine stimulus of no uncommon value. When a drug accomplishes results which were not obtainable by other agents employed it is fair to accord to it similar virtures when again employed under similar conditions. The only way we can prove the positive value of an agent is from the combined testimony of a number of different observations made by different observers. If we frankly present our data and summarize our conclusions the historian who sifts the wheat from the tears will be able to record a just estimate of the facts collected. It is with this object in view that I offer these brief notes which I have illustrated with cases here briefly presented.

There can be little doubt now, I think, that manganese is a uterine tonic of decided merit. Whilst it has been classed among those agents which act as "Indirect Emmenagogues" my own experience inclines me to the opinion that its acts upon the menstrual function in other directions than as a corrective of anæmia and chlorosis. It seems to have the power of provoking a determination of the blood to the pelvic organs and of so modifying the vascular supply of the uterus as to enable this organ to relieve itself of blood by the necessary process of functional depletion. Its action is more nearly allied to that of ergot, savine and quinine in having a direct stimulating effect upon the uterus, though lacking the ecbolic action of these agents. It is true also that manganese acts as a general corrective of anæmia producing like iron a general improvement in the quality of the blood. As compared with iron, however, its value in anæmia and chlorosis is insignificant. It is probable the drug acts in two ways, first as a general tonic and second as a direct emmenagogue. If this view of its action be the correct one its administration is indicated in those cases of amenorrhœa dependent upon a debilitated condition of the system with which we find associated an atonic and arrested action of the menstrual function, a condition most frequently observed among young girls and sterile women who have been educated under a forced system of mental training or whose habits, occupations and surroundings have been unfavorable to the complete development and successful evolution of the processes of ovulation and menstruation.

Some valid objection has been made against the use of the permanganate of

potash on the ground of its objectionable taste and unpleasant effect upon the stomach. The great affinity of the drug for oxygen leads to its rapid decomposition when brought in contact with organic matter so that this fact must be constantly borne mind in its administration. I have invariably prescribed the gelatine coated pill and have as yet had no serious complaint from any of my patients of any unpleasant effects following its use. I am therefore inclined to the opinion that when the drug is given in pill form gastric distubances may be prevented.

SUPPURATING DERMOID CYST.*

BY CHAS. H. RILEY, M.D., OF BALTIMORE.

Mrs. McC., age 45 years. Married, now a widow. Never pregnant. For last five years has been treated for uterine fibroid by her physician, and for all the symptoms usually attending such growths.

Has had symptoms of malarial poisoning for several years past. On the 1st of last August was taken with an attack of fever called typhoid, since which time she has had constant fever. For the past year has noticed some abdominal enlargement which has grown more during the past two months. For several weeks has had a chill followed by the fever mentioned, and sweats every day. She has considerable abdominal pain. Appetite good and bowels regular.

On examination the abdomen was enlarged to about the size of a fourth month pregnancy, round, elastic to the touch and with a slight sense of fluctuation. The uterus was pushed down behind the tumor.

She was operated upon November 27. Present, Drs. O'Donovan, Jay and myself. A short incision was made and upon introducing the trocar about one and a half pints of melted fat ran through, and after puncturing a separate sac about the same quantity of pus escaped. To neither of these fluids was there any odor. There were some slight adhesions between the sac and abdominal walls in front, between the sac and tissues and down deep in the pelvis, both of which were separated without much trouble. There was a large rounded mass deep down in the pelvis, which upon being removed was found to be a mass of hair. (Specimen.) This mass is evidently what had been mistaken for a uterine fibroid previously, as the uterus was perfectly free from any such growths.

The abdominal cavity was thoroughly cleansed, there was no oozing from the points were the adhesions had been torn; the abdominal cavity was closed with silk sutures and patient placed in bed. She reacted well. Vomited very little. 9.30 P. M. pulse 1.30, temperature 98⅘°.

She was given whiskey and water, and morph. sulph. in small doses.

Nov. 28th. Pulse 140, temperature 90° in the morning, and pulse 150, temperature 100° in the evening. She had vomited occasionally, though not persistently. Has taken milk in good quantity. Has had some slight abdominal pain for which morphia sufficient to relieve was given.

Nov. 29th. Pulse 150, temperature 100⅗°, A. M.; Pulse 150, temperature 100⅘, P. M. Vomited during the night, but not since morning. Is taking milk and whiskey. Slept some and has passed wind from bowels. Has taken about one pint of milk to-day.

Nov. 30. Pulse 150, temperature 101°; evening same. Has taken milk and whiskey, same quantity as before.

Dec. 1st. Pulse failing, temperature 102°. She died during the morning.

Autopsy 20 hours after death by Dr. Harlan. The abdominal incision found united and without evidence of suppuration except a small drop of pus which was squeezed from two of the openings made by the sutures. The peritoneal wound had healed firmly and completely. The peritoneum covering the intestines and abdominal walls was healthy. There was no pus in the cavity and a very small quantity of serous fluid. The ligature on the

*Read before the Baltimore Gynæcological and Obstetrical Society.

pedicle was intact. There had been no hæmorrhage or suppuration at this point. The left ovary had a cyst as large as a hickorynut, which on being opened contained a firm blood clot.

Society Reports.

BALTIMORE GYNÆCOLOGICAL AND OBSTETRICAL SOCIETY.

REGULAR MEETING, HELD MAY 10, 1887.

The President, W. T. HOWARD, M.D., in the chair. WM. E. MOSELEY, M.D., Secretary.

Dr. Chas. Riley reported the following case:

SUPPURATING DERMOID CYST.*

DISCUSSION.

Dr. C. O'Donovan, Jr. said that he had assisted Dr. Riley in removing this tumor; he had noted carefully the various steps of the operation and would like to add a few remarks that would bring into greater prominence certain features of the case that were not fully developed by the reporter. The first of these was the unfavorable condition of the patient, who was very much run down from a long continuance of fever, accompanied by a rapid pulse and disordered condition of stomach. She had been told by her former physician that she was suffering from malarial fever, which may have been the case, as she was spending the winter in the South, but whatever the cause she was evidently in an unfavorable state for operation. Dr. Riley had used various tonics with little or no success, and, thinking that the presence of the tumor influenced the general condition, he determined to remove it. The justice of his decision was apparent after the operation, for her temperature and pulse rate both fell to nearly normal by the next morning, and she seemed to be in a fair way toward recovery. The only unfavorable step in connection with the operation was the length of time that she remained under the influence of the anæsthetic. Ether was used, carefully administered, and the patient was just about ready for the first incision when a thick smoke poured into the room from a newly kindled fire two stories below. This delayed the operation for fully half an hour, until the fire could be extinguished and the room cleared of smoke, when the work was proceeded with, no further trouble ensuing. When the patient was put to bed she was in a condition of partial collapse, but she rallied very promptly after the application of hot water in bottles, and presented favorable symptoms by night.

Dr. W. P. Chunn had seen one case of dermoid cyst in which the cyst contents ran out like melted fat. In this case a diagnosis was not made until after the abdomen was opened.

He thought it was very difficult to say what was the exact cause of death in such a case as that reported. In one case operated on by himself he had considered the death to be due to a condition of extreme nervous depression, although, when he reported the case before the Clinical Society several gentlemen expressed the opinion that it was owing to acute septicæmia.

Dr. John Morris thought that judging from the long continued fever and quick pulse, together with the history described, Dr. Riley's patient was probably suffering from some lung or other constitutional trouble, and that this condition would account for the death in her case. The fatal result was due, no doubt, to exhaustion and not septicæmia.

He thought the temperature of the woman at the time of operation of great importance. Dr. Peaslee would not operate at less than 75° to 80°, and he (Dr. M.) considered that such a temperature was the proper one.

Dr. W. T. Howard said that Dr. Albert H. Smith had expressed the opinion that the operating room was frequently too warm. Dr. Bantock had operated at 60° and Mr. Tait operated at 70°. He considered that one way in which the spray did harm is by chilling

*See page 88.

the intra-abdominal organs. Mr. Thornton still uses a very large spray, but Mr. Keith has given it up, and in a letter to Dr. Howard, ascribed his own kidney trouble to the irritating effects of the spray.

Dr. Howard referred to two cases of dermoid cyst upon which he had operated. He considered that the amount of fever which could be found by different people differed greatly. Dr. Metcalf had even said to him that a temperature of 102° would kill some women. In his experience death from septicæmia rarely occurs before the fourth day and generally after that date.

Dr. O'Donovan, Jr., replying to criticisms, stated that the temperature of the room was fully up to what is necessary in abdominal sections. He had not himself examined the patient's lungs for any trouble then, but was satisfied from the readiness and ease with which she took ether that there could be no serious disturbance of this function. The idea that influenced Dr. Riley in the operation was that the patient was suffering from some form of peritonitis induced by the presence of the tumor, or of septic infection from a suppurating cyst. Would not like to hazard an opinion as to the cause of death, as post-mortem examination even failed to afford a clue to such diagnosis. Thought the operation, however, immediately called for, as the only means to save the patient's life.

Dr. T. A. Ashby read a paper entitled

NOTE ON THE TREATMENT OF AMENORRHŒA WITH PERMANGANATE OF POTASH.*

DISCUSSION.

Dr. I. R. Page had used the permanganate of potash on various occasions, but as it produced marked gastric disturbance he had discarded it, and used the binoxide of manganese in 2 gr. capsules, 3 times a day, without hurt to the patient's digestive processes. Thinks that in some instances where he had followed advice received through medical journals of giving the permanganate of potash on empty stomach and administering thereupon a copious draught of water, there was very little pain in stomach manifested, and the effect on menstruation was manifestly beneficial. The classes of cases in which he used it were those of young girls at school who were suffering with chlorosis and in that of married women "fair, forty and fat," who had almost ceased to have any monthly "flow."

Regards it as a very valuable remedy and has had good success with it when other drugs (iron, etc.) had failed.

Dr. P. C. Williams had used binoxide of manganese in cases of amenorrhœa and thought if it was the manganese that was of value that form was preferable to the permanganate of potash. Had used the binoxide in a case of long continued amenorrhœa in an anæmic patient and the relief had been prompt and permanent.

Dr. O'Donovan, Jr., said that his experience with potassium permanganate had not been such as to encourage him in its use. It is true that he had used doses larger than those recommended by Dr. Ashby, and thought that he might attribute the stomach trouble that invariably followed to this cause. He had been influenced in giving up the use of the drug after a few trials on account of good success attending galvanic stimulation of uterus for amenorrhœa. He recognized, of course, that there must be a certain number of cases in which local applications would be inadmissible until all other means had failed, and thought that potassium permanganate would prove to be valuable for this reason.

Dr. Howard had used permanganate of potash to a considerable extent. In a number of cases where he could find no apparent cause for the amenorrhœa it had succeeded in reëstablishing the flow, while in many other cases the drug had failed. The great drawback to its use is its tendency to irritate the stomach. Some patients had been unable to take over one grain at a dose, while others had borne one and a half or two

*See page 85.

grains equally well. He does not use it in cases of anæmia or chlorosis, depending, in such conditions, upon general tonics.

In treating cases of amenorrhœa it is very necessary to make as exact a diagnosis as possible. In some cases the condition may be due to absence or an undeveloped state of the ovaries. He believes it is impossible in most cases to feel the normal ovaries by bi-manual examination. He considers the potash permanganate a very useful drug in many cases if it can be borne by the stomach.

Dr. Ashby said, in closing the discussion, that his object in bringing this subject to the notice of the Society was to elicit a discussion which would indicate the experience of the members with permanganate of potash in amenorrhœa. He had not entered into the discussion of the treatment of amenorrhœa by other methods as the aim of his remarks was to show the class of cases in which he believed the permanganate was of special value. When this subject was first brought to the notice of the profession by Drs. Ringer and Merrell, a large number of cases were reported by these obsevers showing the different varieties of amenorrhœa in which the permanganate had been found serviceable. Among the number were classed cases of marked anæmia and chlorosis. Manganese was shown to have decided tonic properties in addition to its influence as an emmenagogue.

Dr. Ashby thought that manganese was inferior to iron in cases of amenorrhœa dependent upon anæmia and chlorosis. He had found it more serviceable in cases of sudden suppression, or scanty flow dependent upon functional disturbances of the processes of ovulation and menstruation associated with feeble development of the generative apparatus, or referable to the habits, occupation and general physical condition of the patient. He thought that Dr. Fordyce Barker had given the best definition of the class of cases in which the drug was most useful that he had seen. Dr. Barker had grouped these cases under three heads; *first*, young girls between 14 and 19 years of age who are subjected to excessive mental work and to other habits of life which depress their physical robustness and cause a suppression of the menstrual flow; *second*, ladies, both young and married, in whom amenorrhœa is temporarily induced by seasickness; *third*, ladies between 30 and 40 who rapidly gain flesh and grow stout while at the same time menstruation decreases both in duration and quantity.

In cases of arrested or retarded physical development of the uterus and ovaries electricity would be found more efficient than emmenogogues. In amenorrhœa dependent upon anæmia or chlorosis, Dr. Ashby thought iron more serviceable than manganese. Here the iron was especially needed to improve the quality of the blood. After a prolonged use of iron, the permanganate of potash might be judicously employed to stimulate the dormant uterine function.

Dr. Ashby thought that he had been fortunate in not having his patients complain of the unpleasant effects of the drug. This he knew was not the general observation. It was his practice to use the one grain gelatine coated pill. Beyond one or two complaints of unpleasant eructations following the use of these pills, he had heard of no subsequent trouble. Dr. Barker recommended the administration of the drug three hours after a full meal. He advised his patients to drink a tumblerful of water, not cold, after taking a pill. This method was considered the best.

Dr. W. P. Chunn reported a case of

DOUBLE OVARIOTOMY

in which he had to enucleate one cyst from the broad ligament. Both cysts were tied and cut short, no temporary clamp being used. Before the close of the operation the patient showed marked symptoms of shock, but the circulation responded promptly to an intra-abdominal douche of hot water which was used both for the above purpose and to clean out the abdominal cavity.

DISCUSSION.

Dr. C. O'Donovan, Jr. was present at the operation, and congratulated Dr. Chunn on the skill and perseverance he had shown in separating the cyst from the right broad ligament. This enveloped a large portion of one of the tumors, and was so spread out upon its surface that at first sight it seemed impossible to tell where each ended, but by careful dissection with the finger nails and blunt instruments he succeeded in getting a very respectable pedicle; rather short, it is true, and voluminous, but serviceable, as the event has proved.

One more point: When the operation was completed, and just before closing the wound, Dr. West, who was administering the ether, remarked that the pulse was becoming quite feeble and rapid, and suggested a hypodermic of whiskey. Dr. Chunn then said: "Hold on a moment, I am going to wash out the peritoneal cavity with warm water; let's see what effect that will have as a stimulant to the pulse." He then poured in from a pitcher about four quarts of warm water, and the effect on the pulse was instantaneous, greatly increasing its fullness and diminishing its rapidity, so that the patient was put to bed in an excellent condition after an operation lasting about an hour and forty minutes.

Dr. Howard remarked that Mr. Keith had used warm water for washing out the abdominal cavity for the past 20 years. Mr. Tait also uses it in his laparotomies.

Dr. Howard referred to Mr. Keith's practice of introducing one hand into a cyst while enucleating it.

Dr. Williams thought the temperature of the water used to wash out the abdominal cavity is a matter of considerable importance. He knew that the natural temperature of the body is 98° or 99°. It is apparent that when the patient is prostrated by shock, and we desire not only to wash out the cavity, but also to arouse the patient, that we must use a temperature high enough to produce decided impression in order to obtain the desired stimulation. This can only be done by a temperature exceeding 99°—say from 100° to 105°.

A sufficiently safe guide would be the sensation of the hand. Water feeling decidedly hot to our hand would be sufficient to stimulate and ease the patient, and overcome the treatened shock.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD MAY 5, 1887.

The President THOMAS M. DRYSDALE, M.D., in the chair.

Dr. Daniel Longaker read a paper on

PLACENTA PRÆVIA.

I desire to re-open the discussion on placenta prævia to submit a few clear and distinct rules of practice in this grave emergency. In a recent debate in this Society it was quite evident that our ideas were not as clear as they have been. One of the methods of treatment and the best one that has ever been pursued in the appropriate class of cases, a method which will be found the best in the vast majority, was even regarded with scepticism. I refer to the treatment by means of bimanual version after the manner of Braxton Hicks a plan by which three operators, Behm, Hoffmeier and Lomer have saved 92 out 93 patients under their personal care, (*American Journal of Obstetrics* Dec. 1884, p. 1242.) Let me detail briefly my last case.

Patient a IIpara, æt. 28, called me at 4 P. M., April 19, 1887. The anticipated date of confinement was one month later. Eight day before the date she had had a trifling loss of blood but did not send for me. I was called because of a sudden hæmorrhage coming on without pain while she was walking across the room. It was difficult to estimate the quantity of blood lost, not more than a half a pint. Arriving a half hour later I found the os admitted barely two fingers. Placenta on the right side at the margin of the internal os, a slight flow of blood continued; she

had had a few pains in the hypogastrium. Bimanual version was once decided upon; two fingers of the right hand in the vagina pushed up the head, while the left depressed the breech down towards the right side. As soon as the head was above the linea terminalis the right hand also manipulated from the outside raising the anterior shoulder toward the left hypochondrium, the left hand constantly manipulating the breech towards the pelvic brim. As soon as version was completed the two fingers of the right hand were introduced into the vagina and the membranes ruptured at the margin of the placenta. A leg was ready to drop into reach of the index-finger; it was brought out carefully avoiding displacement of the cord. The delivery was left to natural efforts up to the expulsion of shoulders. The arms had become extended, they were easily brought down and the head was quickly extracted. Hæmorrhage was practically absent after the leg tamponed the dilating cervix. Child a female, weight six and a half pounds, development of 34th to 36th week. It cried almost immediately and has thriven remarkably. Slight post-partum hæmorrhage, but not a single unfavorable symptom and the mother was about on the ninth day feeling perfectly well.

No anæsthetic was used, and as illustrating the ease with which turning by the bimannuel method may be done, I may say that the patient does not know this was done.

In order that our ideas may be as definite as possible, I will emphasize the points made in narrating the history of the case, by a few quotations from Lomer's valuable contribution.

1. "Turn by the bimanual method as soon as possible."

2. "Pull down the leg and tampon with it and the breech of the child, the ruptured vessels of the placenta."

3. "Do not extract the child then."

4. "Do away with the plug as much as possible. It favors infection and valuable time is lost by its application."

5. "Do not wait to turn until the cervix and os are sufficiently dilatated to allow the hand to pass."

6. "Turn as soon as you can pass one or two fingers through the cervix."

7. "Use chloroform freely."

8. "Rupture membranes at margin of placenta. If this is not possible perforate the placenta."

9. "The next part of the treatment is expectant. Experience shows that flooding ceases."

So long as these results remain unsurpassed by any other plan of treatment in the hands of different operators are we not morally bound to accept these teachings? In a large number of cases, collected by Charpentier, Depaul, Simpson, Scwarz, Trask, Müller and King, we have a maternal mortality ranging from 35 to 22.5 per cent; and in the hands of single (opus cit.) operators, Spiegelberg, Barnes, Hecker, Müller and Murphy, a mortality ranging from 16 per cent. to nil in cases of Müller and Murphy.

It is also to be feared that harm may have been done by the vigorous defence of the tampon, and that there may be danger of going back to the old bad record. While it may, though rarely, serve a useful purpose in controlling hæmorrhage, it is a dangerous agent and one that can nearly always be superseded by the natural and safe tampon formed by the *leg and breech of the child.* I cannot better illustrate this than by a brief reference to one of the tampon's victims. Patient tamponed and when the os was dilated she was delivered of a dead baby by forceps. The record says she died one week after delivery of septicæmia. Another died six days after version and presumably immediate extraction for the autopsy showed rupture of the inferior segment of the uterus. My own record is seven cases, all the mothers saved and three of the children. I wish to plead finally the ease of performing the operation, the necessity for action in the face of hæmorrhage and the efficiency of this natural tampon.

Dr. D. Longaker read a paper on

HYDRAMNION; MALFORMATION OF FETUS.

The history of the following case with a description of the peculiarities presented by the fœtus is submitted in the hope of contributing to our know-

ledge of a disease, the pathology of which is still frequently involved in some obscurity. January 1, 1887, Dr. E. J. Santee requested me to see, with him, Mrs. R., who supposed herself seven months advanced in her fourth pregnancy. The patient had always enjoyed good health. In her former pregnancies she was delivered at term without complication. "There were no symptoms to call attention to any unusual condition until three weeks before the date of my visit. Her symptoms at this time were attributed to impending miscarriage. She complained of pain, especially in the umbilical and epigastric regions. This pain was much worse at night, so that large doses of opiates were demanded. I found her confined to bed, pulse and respiration normal. Temperature sub-normal 97.5° at 4 P. M. Her abdomen was uniformily enlarged from pubis to ensiform cartilage; girth at umbilicus 37 inches. Percussion resonance in flanks; fluctuation quite distinct. On careful palpation no trace of the fœtus could be found. No fœtal movements were noted. No fœtal heart sound. She had not felt life for four days. The uterine walls were firm and unyielding. Supra pubic region œdematous. Examination per vaginam revealed the cervix intact, os externum patulous. The internal os admitted the index finger. Immediately over this was felt the tense amnion; it conveyed the impression of the membranes during a labor pain. We concurred in the diagnosis of hydramnion and that in the absence of symptoms of an urgent nature it was best to treat the case expectantly.

Three days later pains set in actively. The amount of fluid was large. It was estimated as certainly more than one gallon. Some inertia followed its discharge, for which ergot was given. The feet presented. Powerful traction was necessary and delivery only succeeded after the spinal column parted. Convalescence was slow but recovery was finally complete.

The fœtus of six and a half months was 34 cent. long and weighed 1500 grams. The epidermis was macerated and partially peeled off on the extremities. The neck was the seat of a tumor, fluctuating in the greater part of its extent, the size of an average full term fœtal head. It involves the anterior and lateral aspects and extends from mastoid to mastoid and with the head in a position of moderate extension it reaches from the border of the inferior maxilla to the ensiform cartilage. The integument over the swelling is thin and almost semi-transparent. An excellent idea of the size of the swelling and of the appearance of the fœtus may be gained from the two photographs, one showing a front view, the other a profile. The entire head is œdematous, the swelling, however, being most marked over the frontal and facial region. Ossification of the two halves of the inferior maxilla is imperfect. On section the pleural, peri-cardial and peritoneal cavities were found moderately distended with serum of a faint red color. The heart is greatly hypertrophied. It is fully twice the size of that of another fœtus of a corresponding period of development. The kidneys and suprarenal capsules are normal. No abnormality was found in the remaining abdominal and thoracic organs. The stump of the umbilical cord was œdematous. The placenta could not be examined as it was immediately thrown away by the nurse. The spinal column was severed in the cervical region. The trachea, œsophagus and vessels are also torn across. The head is attached to the trunk solely by the integument and muscles of the neck on its anterior aspect. A portion of the brain-like mass of the tumor had escaped through this laceration. The large vessels passed through the mass. Dr. W. J. Haehulen, who kindly examined the specimens, reports that it is a myoma.

There can be no doubt that in this case the excessive amount of fluid was of fœtal origin. It is greatly to be regretted that the placenta could not be examined. The hypertrophy of the heart was due to the pressure exerted on the great vessels of the neck by the tumor. In like manner this interferred with the return current of blood and hence the œdema. The same condition must have

existed throughout the entire venous system. Increased pressure existed in the umbilical vein and hence transudation into the amniotic cavity by the capillary network of Jungbluth which has been shown to be persistent at term in hydramnion (Lusk, Science and Art of Midwifery, p. 288). It is also known that an increase of pressure in the umbilical vein causes a rapid transudation into the cavity of the amnion (Loc. cit.) It is worthy of note that the kidneys were not hypertrophied, nor was there indication of increase of functional activity in distension of the bladder. The œdematous condition of the cord may also be regarded as significant of increased pressure in the umbilical vein. This increased pressure, primarily due to embarassment of the heart, must be regarded as the direct cause of the rapid and abnormal accumulation of fluid in the cavity of the amnion.

Dr. Robert T. Wilson (A Contribution to the History of Hydramnois, *American Journal of Obstetrics*, Jan., 1887) has recently given an interesting resumé on this subject. His case is of peculiar value in so far as it enable us to determine the mooted point of maternal origin in some of these cases. A careful dissection of the fœtus by Prof. Welsh failed to reveal any abnormality. The enormous amount of seven gallons of fluid had accumulated.

DISCUSSION.

Dr. Kelly was glad that some of our countrymen had at last taken up this interesting subject in a scientific manner, pregnant as it is with important issues on other questions. The admirable paper of Dr. Wilson, of Baltimore, deserves especial mention. There is no doubt concerning the correctness of Dr. Longaker's views and that the associated hydramnios was due to the hypertrophy of the heart which in turn depended upon the pressure of the tumor upon the large vessels of the neck. The possibility of transudation from cord and placental surface under such mechanical conditions have been abundantly proven. The most interesting cases are such as have been recorded by Schatz and Küstner in which the hydramniotic twin has been shown to have a heart enlarged by keeping up the anastomatic circulation with the weaker twin.

Correspondence.

THE METHOD OF THE "THREE CHAMBERS."

BALTIMORE, May 31, 1887.

Editor Maryland Medical Journal:

DEAR SIR:—By the proceedings of the Baltimore Academy of Medicine, published in your last issue, I find I have been misunderstood, and therefore ask space for a few corrections. In the first place let me say that three specimens of urine that have been rapidly passed one after the other into as many clean vessels standing in a row are required, and the plan from this fact has come to be known as the method of the *three chambers*. Into the first the patient voids about two-thirds of the urine so as to thoroughly wash out the urethra and external organs, and thus exclude foreign or diseased matters that cling to those parts from contaminating the other urine which is shortly to follow. He then passes almost the whole of the remaining urine into the second chamber which now generally contains the uncontaminated bladder contents, and reserves the dregs or that which requires a straining effort for the third. Each separate specimen is now put in a bottle labled, 1st, 2nd, 3rd, according to the time of passage, and is ready for chemical and microscopic examination. By this means we arrive at diagnosis by exclusion, for if albumen, pus or blood is found in the urine first passed and not in the second we may be sure it comes from some place external to the bladder, and when in a hurry to determine about kidney disease we can save much time by examining only the pure urine from the second chamber. The third, or dregs, which may also contain some of the urine just excreted by the kidneys, it is important to examine, especially in

old persons with enlarged prostate, by the microscope for sediments, and during the past few years I think I have saved much time and cleared up obscure cases by employing it. At times three examinations may seem superfluous but as I have often diagnosed conditions that were not previously suspected, and as that is the number usually chosen by chemists, a little exactitude may not be out of place for the general practitioner. Yours respectfully,

J. R. Uhler, M.D.,
661 W. Fayette St.

Atropine Injections in Hæmoptysis.—The subcutaneous injection of atropine in cases of hæmoptysis was recommended by Tacke in 1882, and Dr. Hausmann, of Meran, has found it to be a most successful means of allaying recurring hæmorrhage from the lungs. (*International Klinische Rundschau*, No. 5, 1887). The great indication is to allow of the formation of a thrombus in the bleeding vessels, as Traube explained, by diminished blood-pressure. The capillary pressure will be lowered when the smaller arteries have their calibre lessened: hence the use of digittalis, restricted diet, and rest. Reflex vaso-motor constriction may also be assisted by astringents or the application of cold. In chronic (and passive) cases iron is recommended. Ergotine, turpentine, morphine injections, and alcohol are favourite remedies. In passive hæmorrhage from congestion some recommend wine, walking about, and deep respirations; in active hæmorrhage, only rest, ice and morphine. But there are cases which resist all these measures, and in these Dr. Hausmann has found hypodermic injections of atropine wonderfully efficacious. The following examples are given; 1. A patient with cavities in both lungs had hæmoptysis twice daily for six days to an alarming extent. The hæmorrhage was then arrested by a hypodermic injection of 0.3 milligramme of atropine ($\frac{1}{200}$ grain nearly). After two months the hæmorrhage recurred, and was only arrested by recurrence to atropine. 2. A patient at San Remo was troubled with hæmoptysis all through the winter of 1884, in spite of every care, and it only desisted in the summer. Next winter at Meran he was again similiarly affected for a long time, till two injections of atropine (of the same strength as above) arrested the attack altogether. 3. In October last year Dr. Hausmann at once stopped severe hæmoptysis in a lady who had been treated in vain for eight days by ergotine injections, turpentine, etc. The qualtities of atropine recommended for hypodermic injections in cases of profuse or moderate hæmorrhage from the lungs, which resists other means of treatment, vary between 0.2 and 0.5 milligrammes ($\frac{3}{1000}$ grain to $\frac{7}{1000}$ grain).—*British Medical Journal.*

The Vienna General Hospital.—About a fortnight ago rumors began to take the form of press dispatches alleging the discovery of grave abuses among the employees of the famous *Allgemeines Krankenhaus* of Vienna. These statements have lately taken more definite shape, and relate chiefly to accusations of extortions of money from the patients by the nurses and of neglect or ill-treatment in the cases of patients who were unable or unwilling to meet the demands made upon them. The hospital, as is well known, is an institution of which the Viennese are particularly proud, and one that has taken a conspicuous part in the advance of medical knowledge for many years past. For these reasons, in addition to considerations of humanity, it is earnestly to be hoped that the officical investigation which has been set on foot will either prove the falsity of the imputations or else speedily do away with any further cause of complaint.—*Exchange.*

An Injection For Blennorrhœa.—

℞.—Acid. tannic. .	gr. 23
Plumbi subacetat. (liquid)	♏ 45
Tinct. catechu . .	ʒ jss.
Tinct opii . .	♏ 23
Aquæ rosæ . .	ʒ 13½
Aquæ destillat. .	ʒ 37½

Sig.—Inject morning and evening, and allow to remain in the urethra two or three minutes. — *L'Union Médicale*, April 11, 1887.—*Med. News.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JUNE 4, 1887.

Editorial.

INSANITY IN THE CRIME CLASS.—For years certain alienists, with Maudsley at their head, have been bringing forward into clearer light the theory that there exists a special crime class. While unable to locate the seat of the moral faculties, psychologists now recognize a brain of low order which is spoken of as "characteristically criminal." Carefully compiled statistics go far towards proving this theory, which once fully established will radically after the management of these unfortunate people. Of course it is necessary to view the subject in the most comprehensive manner. It is not that the offspring of criminals inherit merely the predisposition to crime, but their whole training, their earliest impressions, the constant force of example before their eyes, in short all the circumstances and surroundings of their lives foster and encourage the hereditary taint. Thus these several forces, inherent and external, acting for a long time, gradually evolve a class of people in whom the moral sense is to a large extent rudimentary. They often possess a high degree of intelligence developed in certain directions, they are cunning, absolutely remorseless, stolid in view of death, generally fully recognizing the fact that they merit extreme punishment but having no appreciation of moral guilt.

Dr. Wm. Duffield Robinson, who is the physician to the Eastern State Penitentiary of Pennsylvania, in a paper read before the *Philadelphia Neurological Society*, March 28th, gives some interesting statistics concerning this crime class. Physically they are imperfect specimens, and some 20 per cent. of them have had syphilis. Neurotic diseases seem to be very common among them, especially epilepsy, and mental diseases in general far exceed the proportion common to the general race.

Tubercular diseases also seem to furnish a very large number of deaths, but this as syphilis would almost necessarily follow their mode of life. There seems to be an absolute lack of control over the tendency to commit crime, and the author of the paper under consideration gives a very striking example of this in the case of a criminal who made his escape with a large sum of money and was arrested a short while after for stealing a necktie. At the Eastern Penitentiary about 17 per cent. of the convicts show strong family crime histories, and of 3500 convicts 245 were insane when received into the institution, and 40 developed insanity during their confinement, being about 1 insane to 13 sane. These fact are not true of one institution only, but of all, and they suggest two very important queries. The first concerns the detection of insanity, the determination of moral responsibility. The general practitioner, especially in the country and small towns, is often called upon to decide this question and unfortunately he is rarely capable of doing it intelligently, as the facts above stated abundantly prove. Here the trouble lies in some measure with the medical college, and it is a deplorable fact that in very few is the subject of insanity ever taught. It is true that no faculty could expect to make skilled alienists out of the classes annually turned out, but they should give them some systematic instruction on the subject, and emphasize its importance.

The other question relates to the management and treatment of this class. Clearly the present method is defective. We have seen how strongly heredity asserts itself among these unfortunates, and it is evidently unwise to release

such people after a longer or shorter term, let them go out and propagate their wretched breed, and return either to the penitentiary or the gallows. Surely society should be relieved as far as possible of such an element, and as long as there is a doubt as to whether they belong to the penitentiary or the mad house, there should be an institution occupying this middle ground.

The American Climatological Association.—The meeting of American Climatological Association held in this city during the present week has been a decided success. The large number of papers read and the instructive discussions indicate the active interest which the members of the Association take in the consideration of the important subject of climate and its influence upon health and disease. The membership of the Association already large, and highly creditable in the character of the many well-known gentlemen who compose it, was largely reinforced by the election of a number of new members, thus indicating that the important work is growing annually in interest and in its hold upon the medical profession. The general scope of the work undertaken by the Association tends to arouse a better study of the various health resorts of this and other countries and thus by preventing data bearing upon the influences of these resorts upon given classes of disease is of direct service to the profession.

The Association has already done a good work in making known the influence of different climates upon different diseased conditions, and in establishing such rules as will enable physicians the more intelligently to direct their invalid patients to localities suitable to their diseased conditions. Moreover, with the growth of the study of climatology, now actively in progress by the membership of the Association, a stimulus will undoubtedly be given to the consideration of other questions bearing upon physical care of a large class of invalids who may be deprived of the means of seeking health away from their homes.

The Climatological Association has entered a large and rich field of investigation presenting a wide range for study and observation and the possible attainment of results of large application and great benefit to the human family. Its meetings, therfore, from year to year cannot fail to receive marked notice from the scientific world.

Miscellany.

The Treatment of Empyema in Children, with Particular Reference to the Relative Advantages of Aspiration and Incision.—In a paper having the foregoing title, Dr. L. Emmett Holt, offers the following conclusions:

1. All methods of treatment yield better results than in adults.

2. We are never justified in leaving a case to nature.

3. Aspiration holds out a reasonable prospect of success in cases of localized empyema; but a very slender one when the exudation is general.

4. If, after two aspirations at most, the pus reaccumulates and shows no tendency toward a transition to serum, this method should not be persisted in.

5. In cases of a large effusion, one aspiration may be done preliminary to the cutting operation, to avoid any possible danger which might result from a too rapid with-drawal of the fluid.

6. In all other cases a free incision should be made as early as possible, preferably under local anæsthesia, always with the strictest antiseptic precautions.

7. The operation of puncture with a trocar and drainage aims at a cure by the same means as incision; but it is not more safe and very much less certain.

8. Excision of the ribs is rarely required; never in early operations, as it appears to prolong the discharge without giving any corresponding advantages.

9. The treatment of empyema cannot better be epitomized than in the words of Wagner: "*Early incision, perfect drainage, and complete antisepsis.*"

Under this method this affection,

from being one of the most fatal of childhood, has became one of the most amenable to treatment.

A Surgeon Refused His Fee.—The newspapers give prominence to a dispute between Dr. Marion Sims and Nat. Goodwin, the husband of the late Eliza Weathersby, the actress. Payment is refused on the old ground that "the treatment did no good." Dr. Sims was called in consultation by the attending physician, Dr. T. S. Robertson, who was in doubt as to the nature of an abdominal tumor for which his patient suffered. The result of the consultation, that an operation afforded the only hope of cure, being communicated to the patient, she earnestly requested its performance. The outcome being fatal, the husband claims that the operation did no good and should not be paid for! Under this extraordinary theory surgeons would soon have to abandon their work. Such actions as those indicated above are particularly unjust. Many surgeons undertake desperate operations against their own inclination and even interest, solely to give the patient an only chance. In such cases the attempt to escape the payment of the fee by claiming that "treatment did no good," furnishes an illustration of colossal meanness, beyound the power of dramatic art to exaggerate or even burlesque.—*Med. Rec.*

To Arrest Nasal Hemorrhage.—In persistent hemorrhage from the nasal cavity, plugging the posterior nares should not be done until an attempt has been made to check the hemorrhage by firmly grasping the nose with the finger and thumb, so as to completely prevent any air from passing through the cavity in the act of breathing. This simple means, if persistently tried, will, in many cases, arrest the bleeding. The hemorrhage persists because the clot which forms at the rupture in the blood-vessel is displaced by the air being drawn forcibly through the cavity in the patient to clear the nostrils. If this air is prevented from passing through the cavity, the clot consolidates in position and the hemorrhage is checked.—*Edinburgh Medical Journal.*

Sparteine, in Comparison with Digitalis.—Stalssels has made extensive experiments in Vienna, and concludes as follow:

Sparteine, in doses of $\frac{1}{6}$, $\frac{1}{3}$, and $1\frac{1}{2}$ grains produces the same results as digitalis, in somewhat less degree. It not a pure diuretic. No ill after-effects were observed.

Digitalis is superior to sparteine in every respect. It is only when digitalis is not well borne, or when the newer drug can be used as an adjuvant to digitalis that it should be employed.—*Centrablatt für die Gesammte Thérapie*, April, 1887.—*Med. News*

Dosage with Children. — Buttin gives the following table:

For children from

1 to 2 years,	$\frac{1}{10}$	the dose for adults.	
2 to 5	"	$\frac{3}{20}$	" "
5 to 7	"	$\frac{1}{5}$	" "
8 to 10	"	$\frac{3}{10}$	" "
11 to 13	"	$\frac{1}{2}$	" "
14 to 16	"	$\frac{2}{3}$	" "
17 to 19	"	$\frac{3}{4}$	" "

For aged persons, between 65 and 80, $\frac{4}{5}$ the ordinary adult dose.—*Journal de Medicine*, April 10, 1887.

On Horny Growth of the Penis, with Exhibition of a Remarkable Case.—Dr. J. H. Brinton, of Philadelphia, read a paper on the above subject before the recent meeting of the American Association of Genito-Urinary Surgeons, exhibiting a specimen and referring to those on record. His specimen was from a man on whose penis a horn had existed more than four years, having started from a wart. The wart had itched occasionally, and the patient had scratched it for this reason. Gradually it turned into horny substance. It caused no trouble, except mechanical interference with coition. The horn sprang from the base of the glans, at the coronary border, and was attached to both the glans and prepuce; it was one and seven-eighths inch long, one and three-eighths inch in

circumference; it was curved forward. A peculiar feature in this particular case was the fact that the horny plate surrounding the meatus almost occluded the meatus, so that the urine passed only in drops. The urethra behind the horny plate was not contracted. The horn was cut off, and the man left the hospital after about three weeks.

The rarity of horny growths upon the penis was somewhat remarkable. He was surprised to find only fourteen cases recorded in English, German and French literature. A few more cases had been vaguely alluded to. They occurred either as well-marked projecting horns, or as rough, flat, horny plates occupying the glans penis; they were sometimes multiple. The longest on record was three inches.

Medical Items.

The bill to regulate the practice of medicine in New York State passed the Legislature on May 23d.

The American Academy of Medicine holds its annual meeting on Friday and Saturday, September 5 and 6, 1887, at Washington, D. C.

By the will of the late Oliver Hoyt the sum of $20,000 has been bequeathed to the Methodist Episcopal Hospital of Brooklyn.—*Med. Rec.*

The Ohio State Medical Society will hold its next annual meeting at Toledo, June 15, 16 and 17, 1887. Thos. McEbright, M.D., President; G. A. Collamore, M.D., Toledo, Secretary.

Leon Gosselin, the eminent French surgeon, died on April 29th, after a long and painful illness. He succeeded Velpeau as Professor of Clinical Surgery in 1867, and succeeded Nélaton in the Academy of Sciences in 1874, and was recently made President.

The Legislature of Pennsylvania has voted appropriations to the Orthopædic Hospital, the Veterinary Department of the University of Pennsylvania, and the Pennsylvania Museum and School of Industrial Art.

The Baltimore Academy of Medicine elected the following officers for the ensuing year: President, Dr. W. C. Van Bibber; Vice-President, Dr. B. B. Browne; Rec. Secretary, Dr. C. C. Bombaugh; Reporting Secretary, Dr. W. B. Canfield; Treasurer, Dr. G. Lane Taneyhill; Executive Committee, Drs. T. A. Ashby, Hiram Woods and R. T. Wilson.

The Baltimore Academy of Medicine has increased its annual prize to $100, which amount will be awarded as follows: For the best paper read during the year $50, to the second best paper $30 and to the third best $20.

The Committee on Arrangements announce reductions to members of the Congress and their families, as follows: Cunard Line, 10 per cent. reduction; RedStar Line, for round trip (Antwerp and New York) tickets, $100; Inman Line, Liverpool, round trip, $100: Hamburg Line, $90; Royal Netherlands, Amsterdam, $85; North German Lloyd, $87.50. Important reductions are also made in the rates of Washington hotels.—*Med. Times.*

The American Laryngological Association has elected the following officers for the ensuing year: President, Dr. R. P. Lincoln, of N. Y.; Vice-Presidents, Drs. J. N. Mackenzie, of Baltimore, and S. W. Langmaid, of Boston; Secretary and Treasurer, Dr. D. Bryson Delavan, of N. Y.; Librarian, Dr. T. R. French, of Brooklyn; Council, Drs. Frank Donaldson, of Baltimore, J. Solis-Cohen, of Philadelphia, F. H. Hooper, of Boston, and E. C. Morgan, of Washington.

A Charity Dispensary for Women has recently been established at 1630 East Baltimore Street under the auspices of a medical staff and a Board of Lady visitors. Its benefits will be extended to poor women residing in the City and State. The medical officers of the Dispensary are as follows: Surgeon in Charge, Wm. T. Cathell, M.D.; Consulting Surgeon, Alan P. Smith, M.D.; Consulting Physician, Thos. B. Evans, M.D., Pathologist, W. T. Councilman, M.D.

At the recent meeting of the American Climatological Association the following officers were elected for the ensuing year: President, Dr. A. L. Loomis, New York; Vice-Presidents, Dr. A. Y. P. Garnett, Washington, D. C.; Dr. J. T. Whittaker, Cincinnati; Secretary and Treasurer, Dr. J. B. Walker, Philadelphia; Council, Dr. E. T. Bruen, Philadelphia; Dr. J. H. Tyndale, New York; Dr. F. H. Bosworth, New York; Dr. Frederick C. Shattuck, Boston, Mass.; Dr. Roland S. Curtin, Philadelphia.

The following were elected to membership: Drs. A. L. Gihon, U. S. N.; W. D. McDougal, San Jose, Cal.; A. C. Peale, United States Geological Survey; G. Wilos Linn, Los Angeles; J. P. Widney, Los Angeles; Frank F. Smith, Saint Augustine; F. P. Henry, Philadelphia; James J. Levick, Philadelphia; Thos. S. Latimer, Baltimore; J. Carey Thomas, Baltimore; D. B. St. John Roosa, New York; S. E. Solly, Colorado Springs; Dr. Dongan, Denver; Thomas J. Mayo, Philadelphia; Walter Platt, Baltimore; S. W. Langmaid, Boston, Mass.; E. C. Morgan, Washington, D. C.; S. H. Chapman, New Haven, Conn.; S. A. Fisk, Denver, Colorado.

The next meeting will be at the specialists' convention in Washington, D. C., September, 1887.

Original Articles.

TUBERCULOUS HEREDITY AND ITS PROPHYLACTIC TREATMENT.*

BY FRANK DONALDSON, M.D., OF BALTIMORE.

(*Continued from last issue.*)

These little bodies may lodge in fissures and excoriations of the skin and produce lupus, or they may be carried by the absorbents to the nearest glands of the neck or the axilla, establish themselves and produce tubercular disease. Indeed it seems wonderful that so many of us escape infection. In numerous instances the growth is slow and years may pass, although they are in the body, before they assert their power.

The infection frequently attacks the most important organs and we find what are called infectious tumors and subsequently general infection. The tubercle is a well-defined nodule which being non-vascular tends, by the aid of the physical conditions of heat and moisture, to be necrotic at the centre—Many of the evil influences, mal-hygienic surroundings, bad air, insufficient food, sedentary occupations, severe illnesses, which were formerly supposed to be capable of producing consumption, we now know are in reality factors in its causation by impairing the nutrition and rendering the animal soil more susceptible to contagion. Old alveolar catarrhs, croupous pneumonias, measles and whooping cough cannot produce tuberculosis, but they often precede it. The same may be said of weak lungs and non-tubercular diseases. The bifurcations of the minute bronchi and slight abrasions afford lodging places for the bacilli. Although the onset of pulmonary tuberculosis is often slow and gradual yet it sometimes marches with fearful rapidity as the currents of the breathed air carry it through the lungs causing peri-bronchitis, new growths, and ulcerations—the alveolar tissue becomes cheesy and necrotic with advancing consolidations and decay with progressive wasting ending incavities (Powell). All of this destructive work originates from the pathogenic effect of this microscopic rod.

When we remember how the sputa of the thousands of consumptives is scattered broadcast in the streets, much of which is readily dried, and when dried it can retain its virulence for months and be wafted by the currents of air we all breathe, we can easily understand how numbers of human beings can be contaminated by it and are finally added to the mortality column.

Fortunately for us even when inhaled into our lungs these microbes do not find a resting place if the soil is not in a condition for them to thrive in it, or the sound epithelium gives no abrasions by which they can enter.

But there is no contagious disease which spreads destruction as does tuberculosis. One seventh of the whole mortality; persons contract it when and where they least expect it. When attacked they think, with Graves, that it has followed some scrofulous degeneration, or with Hughes Bennett, that it came from non-assimilation of fat, or with Jaccoud, from general mal-nutrition, but in fact it was from inhalation of bacilli from dried sputa or from the milk or meat of tuberculous animals.

The detection of tubercle bacilli in the vesiculæ seminales, in the Fallopian tubes and in the uterus itself has opened the question whether or not conjugal intercourse could not spread the contagion. We certainly have genito-urinary tuberculosis.

Henle's doctrine of contagium vivum awaked scientists to the idea that infectious diseases were probably the results of the introduction of living organisms of vegetable origin into the diseased body. This has passed from the region of conjecture to that of actual knowledge. Improved microscopical appliances, new methods of staining and pure cultivations of bacteria have in the hands of many observers cleared the subject of much that was doubtful and controversial.

*Abstract of the President's address read before the American Climatological Association, May 31, 1887.

The pertinent question may be and often is asked, Are there not some cases of pulmonary phthisis which are not bacillary in their origin? It must be borne in mind that the name phthisis is a very old one derived from the fact that there was great and progressive wasting of the body in connection with symptoms which pointed to the thorax and especially to the lungs as the seat of the disease. It was only in the early part of this century that the term had any definite anatomical signification. In the last few years careful investigation with microscopical researches discovered this bacillus as the cause of certainly over 95 per cent. of the cases ordinarily designated as phthisis pulmonalis. It is not pretended that there are no cases of chronic, destructive disease from other causes.

Mechanical injuries may start inflammatory and degenerative changes in the lungs. Under this head ought to be placed what is known as *miners' phthisis*, where are found dense fibroid indurations with large amount of pigmentations of the lung with infiltration of carbon, the bronchioles being sometimes choked with carbonaceous matter. It is claimed that this disease is not bacillary, but as Douglas Powell has said, the conditions are not favorable to the development of bacilli and moreover observations on this point have not been sufficient to test the question.

The disease which has been designated as *bronchiectatic phthisis* is a chronic disease with hectic, night sweats, varying temperature, emaciation and profuse offensive muco-purulent expectoration, symptoms closely resembling catarrhal phthisis, empyemas or broncho-pneumonia with pronounced dilatation of the bronchi. This is said not to be bacillary. There are cases of chronic bronchitis which in their symptoms resemble pulmonary phthisis. Dr. Dickinson regards the *pulmonary lesions in diabetes* as of non-tubercular, inflammatory nature, but Dresfeld, who has attentively studied it, characterizes these caseous broncho-pneumonia lesions as tubercular and he has found the tubercle-bacillus at the postmortems.

We rarely meet with syphilitic ulcerations and gummatous nodules causing diffused pulmonary fibroids, yet there is such a disease and it has been termed *syphilitic phthisis* but it is not pathologically a variety of consumption.

These illustrative cases ought more legitimately to be designated as *pseudo-phthisis.*

The very soul of true science, says Dr. Lionel Beale, is the continual testing of conclusions already arrived at. Such must and will be the case in regard to these results of modern research. In science it is a very easy matter to remain quiet and fixed in the views we have learned in the past. It chimes in so pleasantly with our natural proneness to indolence. We can thus avoid the fatigue of keeping ourselves alive and we can gradually subside into a state of indifference to what is passing the scientific world around us. Such ought not to be the prevailing course in this 19th century when all should be so thoroughly imbued with the love of truth that they will gladly accept it no matter how it upturns their previous convictions. To do so is no disrespect to the past for we can only guide our footsteps by the light of the hour when we walk. The morrow's brighter sun may clear our path and show us where we stumbled.

Let us for a few minutes inquire into the nature of this.

Heredity:

1. There is general agreement that heredity is an important factor in the etiology of pulmonary phthisis, but some writers, notably Cohnheim, think that the influence of heredity has been much exaggerated.

The following circumstances are adduced to show that the influence of heredity has been exaggerated:

(a.) Many of the abnormalities which have been considered as characteristic of an inherited predisposition to phthisis such as the so-called "paralytic thorax," scrofulous lymphatic glands, are evidence of already existing tuberculosis.

(b.) The children of phthisical parents are likely to be surrounded with the same un-hygienic influences and to follow the same occupations which have

favored the development of tuberculosis in their parents.

(c.) Coming into intimate contact with tuberculous parents or brothers and sisters, such children are subject more than others to the tuberculous virus.

(d.) When one considers that one-seventh of the human race die of tuberculosis, it must necessarily happen that a considerable number of tuberculous individuals are the offspring of tuberculous parents, without it being necessary to assume that such individuals inherit any especial predisposition to the disease.

2. Even making allowance for the foregoing considerations, which perhaps show that the influence of heredity has been by many writers exaggerated, it still remains true that heredity is a factor of considerable importance and requires explanation.

The explanations which have been offered are chiefly these three:

(A.) The disease tuberculosis is itself inherited. This is the parasitic theory of heredity and is divisible into two subheads; a. The infection takes place at the time of conception (tubercle-bacilli in the semen). b. The infection is intra-uterine through the blood of the mother.

(B.) The disease tuberculosis is not itself inherited, but a predisposition to it. This predisposition is now interpreted as the existence of some peculiarity in the structure or the composition of the tissues, rendering them suitable for the lodgment and growth of the tubercle-bacilli.

(C.) According to some it is not necessary to assume the inheritance either of the disease or of the predisposition, but the apparent instances of heredity are explained by the subjection of the children of tuberculous parents to the same surroundings and occupations as their parents and especially to the constant influence of the tuberculous virus.

According to this third view (See paragraph 1) what is generally called heredity is only a pseudo-heredity.

3. In elucidation and criticism of these three views the following is to be said:

(A.) *Parasitic Theory of Heredity.* The following facts or assumptions are urged in favor of this theory: a. Jani discovered tubercule bacilli in the otherwise apparently healthy testicles of 8 phthisical patients 5 times; and in the prostate gland 4 times out of 6 cases. This observation may be urged in favor of the conceptional theory of parasitic heredity.—No proof exists that semen containing tubercle-bacilli is capable of fructifying the ovum, or that the latter, if so fructified, becomes tuberculous.

(b.) There are few undoubted instances of congenital tuberculosis. The most satisfactorily observed case of this nature is that of an 8 months tuberculous fœtal calf, whose mother was tuberculous. Tubercle bacilli were found in characteristic lesions of the mother and of the calf. The case was observed and reported by Johne. Several other instances of congenital tuberculosis have been reported, the larger number being in cattle. We have the high authority of Prof. Welch that not *a single undoubted and thoroughly convincing case of congenital tuberculosis in the human subject has been reported.* Cases have occurred in which advanced tuberculous lesions were found in infants dying within the first one or two months of life, where it seemed reasonable to suppose that the disease was congenital, but this supposition could not be positively proven, as infection might have taken place after birth. Even admitting the occasional occurrence of congenital tuberculosis in the human subject (and such has not been actually proven, although it is probable), the fact remains that such cases are so very rare that they are rather opposed to than in favor of the parasitic theory, as a frequent factor in the causation of tuberculosis.

(c.) It has been urged that there are many points of analogy between syphilis and tuberculosis, and that as we know that syphilis is often inherited, so we might conclude that tuberculosis can be inherited. In reply it is to be said that parasitic diseases differ as regards the readiness or the possibility of the trans-

mission of the parasite from the blood of the mother to that of the fœtus. This possibility depends upon whether the parasite can pass through the membrane separating the maternal from the fœtal circulation. In anthrax or malignant pustule this transmission of the parasite cannot take place, for although the blood of the mother is swarming with anthrax bacilli, none can be found in the fœtus. Tuberculosis in this respect seems to belong to the class of diseases like anthrax, rather than to such as syphilis. (Welch.) This idea is supported by an observation of Jani who made a careful examination of a 5 months fœtus of a woman who died of acute miliary tuberculosis, in which form of tuberculosis it has been proven that tubercle bacilli are in the circulating blood. Neither in the placenta nor in the fœtal organs could be found the tubercle bacilli or any evidences of tuberculosis. Still less is it likely that the bacilli could gain access to the fœtus in cases of ordinary pulmonary phthisis, where tubercle bacilli rarely and then only in very small numbers enter the blood. Again the analogy between syphilis and tuberculosis is defective in this respect, as pointed out by Lichtheim, viz: inherited syphilis differs in important particulars from acquired syphilis, one point especially being that in the former the manifestations occur at once as if the poison were in the circulation, whereas in the latter the poison remains for a time circumscribed, local at the seat of its reception. No forms of tuberculosis exist with any such distinctions like those between inherited and acquired syphilis. The so-called inherited tuberculosis does not differ from the acquired cases. The virus has evidently entered in both cases at the same portal.

(d.) It is of course necessary to assume on the parasitic theory of heredity that the tubercle bacillus received either at the time of conception or during intra-uterine life remains in most cases dormant through infancy and childhood, and not until the time of puberty or later undergoes development. This doctrine of latent tuberculosis has been advocated especially by Baumgarten in No. 218 *Volkmann's Samml. klin. Vortiage.* Baumgarten has failed to bring forward any substantial proofs of this assumption. He mentions the occasional development of tuberculous disease about joints or bones which have been previously resected for tuberculous affections. He assumes that where the recurrence of the disease is preceded by months or years of apparent recovery, a small tuberculous focus which escaped removal at the operation has remained latent during this period. Such cases are very rare and there is at least as much reason to assume a second infection as a period of prolonged latency. An important argument against the assumption of congenital infection with the tuberculous virus followed by years of latency is the very exceptional occurrence of congenital tuberculous disease as has already been mentioned—an occurrence so exceptional that its very existence in the human subject is denied by Virchow and, to say the least, is doubtful.

As bearing upon this point as well as upon the general subject of parasitic heredity of tuberculosis, the following words of Koch may be quoted: "There are no facts which justify the assumption that tubercle-bacilli can be present either in intra-uterine life or in extra-uterine life in the organism of the child without their producing manifest changes within a comparatively short time. Now tuberculosis has hitherto been found only very rarely in the fœtus or the new born and from this fact the conclusion can be drawn that the tuberculous virus causes infection only very exceptionally during intra-uterine life. It is in harmony with this view that the animals upon which I experimented, particularly guinea-pigs, which became not infrequently pregnant either before or after the tuberculous infection, not one gave birth to young which were tuberculous at the time of birth. Young cast by mothers in advanced tuberculosis were free from tuberculosis is most simply explained by assuming that not the material of infection itself but certain qualities are inherited which favor

the development of the germs with which the body at a later period comes into contact, that is, that, which we call predisposition is inherited."

(B.) *Predisposition Theory of Heredity.*—This is the doctrine advocated by the great majority of writers. As has been seen there is very little evidence in support of the parasitic theory of heredity, although there is no inherent impossibility in the latter theory of heredity be rejected, and if we admit, as we must, the influence of heredity in the causation of phthisis, nothing remains but the doctrine that heredity is manifested by the inheritance of characteristics of tissue or fluids favorable for the development of the tubercle-bacilli. Not much success has attended the efforts to define in what abnormalities of structure these characteristics reside. The attempts to identify this predisposition with the existence of a certain formation of thorax (so-called paralytic thorax), with premature ossification of the joints of the first rib, with abnormally wide bronchial terminations, with small size of the aorta in comparison with the pulmonary artery, with small lymph spaces, etc., cannot be regarded as successful. We are not able at present to define the nature of this predisposition in terms more precise than those adopted by Koch in the foregoing quotation. Inasmuch as for cholera and certain other infectious diseases we have obtained tolerably clear ideas as to the nature of so-called predisposition to the disease, we need not despair of being able to define more precisely at some future time the physical or chemical substratum of predisposition to tuberculosis. At the present time we have to reckon with predisposition, indefinite as the term may sound, as a factor in the causation of tuberculosis of equal importance from a clinical point of view with the tubercle bacillus itself. It is only by keeping constantly in view this factor of predisposition that we can reconcile the clinical with the pathological and etiological facts concerning tuberculosis.

(C.) *Doctrine of Pseudo-heredity of Tuberculosis.*—There are some who consider that most if not all cases, of apparently inherited tuberculosis may be explained without assuming inheritance either of the disease or of predisposition thereto. They emphasize especially the circumstances which have already been mentioned (pp. 1 and 2), such as the intimate association of the children of tuberculous parents with those already subject to the disease, the continuance by the children in dwellings or other surroundings favorable to the development of tuberculosis, the continuance of occupations which have given rise in the parents to a condition predisposing to tuberculosis, etc. It is also to be remembered that an inheritance of tuberculosis may be simulated by the early infection of children, as by the use of milk from tuberculous cows. These are all circumstances which should be taken into consideration in estimating the importance of heredity, but it cannot be that physicians from the time of Hippocrates to the present have been mistaken in believing that heredity is an important element in the causation of tuberculosis. Statistics show that the lowest estimate affords 10 per cent. of cases in which tuberculous persons were descended from tuberculous ancestors, and the highest estimate gives 83 per cent. of such cases; the average of a series of statistics yielding about 30 per cent. It is unjustifiable, therefore, to throw overboard altogether the doctrine of heredity in the etiology of tuberculosis.

In a recent series of articles by Wahl entitled "Concerning the Present State of the Question of Heredity of Tuberculosis," he reaches the following conclusions:

1. "A parasitic heredity, whether conceptional or by intra-uterine infection, although not impossible, has up to the present time not been proven."

2. "The inheritance of tuberculosis is explained by the inheritance of certain anatomical and physiological abnormalities which favor the formation of an individual predisposition, of a nutritive basis for the health."

3. "The precise nature of the predisposition has not been explained. It is

based probably upon certain modifications of nutrition which render possible a toxic action of certain chemical products produced by the growth of the bacilli."

4. "A large series of cases of tuberculosis which have been hitherto ranked as hereditary do not belong in the category of heredity but are the result of infection under circumstances which stimulate inheritance of the disease."

In conclusion the words of Ruhle in the second Congress of German Physicians at Wiesbaden may be quoted:

"If the inheritance of human consumption be true—and we believe it—if the bacilli represent the infectious material of tuberculosis—and we entertain no doubt of this—then both facts must harmonize with each other, no matter how obscure the manner of this harmonizing may be to us. Whether there is one or there are several ways, in which inheritance may manifest itself, whether it is the tubercle parasite itself which is transmitted or a certain constitution of the nutritive substratum upon which the universally present germ may take lodgement, this we do not as yet know, but it will be learned when investigations have been made in this direction and from this point of view."

Conclusions. — We feel justified, in stating that the experimental as well as the clinical study of tubercular phthisis have established the fact that there are three factors in its causation.

First.—The presence of the parasite, the tubercle bacillus, as a pathogenic element. This is a factor necessary for the production of the disease.

Secondly.—There is as a prominent element in about 30 per cent. of the cases ordinarily met with a susceptibility transmitted by heredity.

Thirdly.—The mal-hygienic and debilitating agents such as foul air, sedentary occupations, violations of the laws of health and other diseases, have a powerful effect, by impairing the nutrition, in developing the disease.

Treatment.—How can we prevent or control the virulence of the microbe and how can we lessen the individual susceptibility, hereditary or acquired?

We know some of the laws of the propagation of the parasite and we must endeavor to change the fertility of the animal soil. It is this heredity which pathologists consider responsible for at least one-third of the mortality. In many children of consumptive parents there are well known evidences of some fault of nutrition which give them a delicate appearance but there are families who pay their tribute to a sad heredity in the midst of healthy appearances. We have in our prophylactic treatment two courses to pursue, first to improve the general health and strength of the subject and the next is to protect them as far as possible from contagion. It is obvious that persons suffering with phthisis, or with a marked predisposition to it should not marry, and still more that they should not intermarry. A girl should not marry until she has completed her physical development. As clear as are these prohibition rules yet an absolute monarch could not enforce them. The child of consumptive parents should be watched and cared for from its birth. A mother with phthisis should be rigorously prevented from nursing her baby, and if possible a healthy wet-nurse be provided for it, until nature shows by the development of teeth that it is prepared for other food as well as milk.

The hygiene of the nursery should be looked after, such as abundance of air space with free ventilation and a comparatively low temperature, careful attention to bathing and the wearing of loosely fitting woolen under garments. As far as it is possible the hereditarily predisposed to phthisis should lead an out door life, especially between the ages of 15 and 21 years, taking care always that every part of the person should be protected by good, light in weight non-conducting clothes. The beneficial influence of sunlight, the source of all life and force, indoors and out of doors, should never be lost sight of. All sources of glandular irritation, eczemas, eruptions of the scalp, and catarrhal affections should be avoided; scrofulous glands should be promptly dispersed and if necessary removed. Human beings

as well as the lower animals when deprived of light, exercise and nutritious food readily fall victims to tuberculosis. City occupations and residences are not desirable but well ventilated country homes on high grounds with southern exposure and dry, thoroughly drained surroundings should be sought for. The physical frame of the chest should be enlarged by mechanical movements and gymnastics under cover, but not in shut up rooms. Sedentary occupations, especially in crowded quarters, are dangerous. Impure air in and out of doors should be scrupulously avoided. If it be possible the predisposed should select their homes in climates of high altitudes which are peculiarly adapted to ward off any development of the disease. They would there have the healthful mechanical effects of lessened barometric pressure, the dryness of the atmosphere, the low temperature and above all of the great purity of the air they breathe, resulting from its freedom from organic and inorganic dust and its aseptic qualities owing to the absence of putrefactive and fermentive germs; its large proportion of ozone, and of the diaphaniety of the atmosphere. All these are influences which clinical observation has proved to be especially beneficial in improving the nutritive functions and promoting the general health. Of medicines those only should be used that assist in digestion or, such as arsenic or iron, which improve the blood making functions. Oleaginous food, such as milk and cream are valuable when readily digested and assimilated. Dr. Hughes Bennett used to say that two of the main causes of tuberculosis were the dearness of butter and abundance of pastry cooks. Of all fats the most readily digested is cod liver oil, and it is the most beneficial owing, according to Dr. Brunton, to its great mobility.—Thus we try to fortify the threatened subject and by hygienic treatment to ward off the disease. We must all concur with Dr. Fagge, that there probably is no family in which the consumptive tendency is so strong that it could not be kept in abeyance by hygienic precautions if they were thoroughly and vigorously carried out. Here is pre-eminently a case where prevention is infinitely easier than the cure after the disease has commenced.

Our next duty is the recognition of the insiduously contagious character of the disease. If we only could devise some means by which we could all be protected from this destructive micro-organism, what a blessing it would be to the human race? How it would diminish the mortality throughout the world. If it were only possible after it had taken possession of the lungs, to destroy it by agents which could not injure the lungs themselves. The advocates of the gaseous enemata treatment frankly tell us that while they claim to lessen materially some of the injurious effects of the tubercle bacilli, yet they do not destroy them. It has been truthfully said that every patient with developed phthisis may be regarded as a laboratory in which pure cultivations of the pathogenic micro-organism are steadfastly and successfully made and expectorated daily, it may be for years. When moist in the sputum it is easy to destroy them, for they are mixed with mucossities, by antiseptic solutions of sulphate iron, bichloride of mercury and such agents. When left to dry they float in the atmosphere and can be carried in clothing as easily as the epidermic scales of scarlet fever. Spittoons and other receptacles in sick rooms should not only be removed, but their contents should be promptly disinfected. If pneumatic cabinets are used for their undoubtedly good mechanical effects in cases of phthisis, the same cabinets should not be employed on those from whom we desire to ward off the disease. When used they should be placed out of doors or in rooms not occupied by consumptive patients, otherwise harm instead of good may result. The threatened should not forget that cities are permanant foci of transmission of the microphyte. Our dust and dried dirt are scattered far and wide by winds, and often they contain dried tubercular expectorations. Soiled carpets and linens often contain expectorated poisons.

Since the *pearly distemper* in cattle is found to be identical with tuberculosis in man, the use of the flesh of such animals as food, furnishes a possible means of infection. When pearly nodules have been shown to be present in the udder the milk of the diseased animal may be polluted by tubercle bacilli. The use of such milk and meat as food even when cooked certainly involves the danger of the transmission tuberculosis.

It is now known that the susceptibility of cattle is similar to that of the human beings. In some warmer climates the mortality in cows from tuberculosis amounts to two per cent.

When in addition to hereditary tendency persons are subjected to privations, indulge in excesses, have sedentary occupations or are depressed by grief, by anxiety, very few will escape the deadly effects of the tubercle bacilli. If the prophylactic treatment is carried out thoroughly well, the hereditary and the acquired proclivity to phthisis may remain latent and the individual never contract the disease.

RECENT ADVANCES IN PREVENTIVE MEDICINE.

ABSTRACT OF THE ADDRESS IN STATE MEDICINE, DELIVERED BEFORE THE AMERICAN MEDICAL ASSOCIATION, AT THE THIRTY-THIRD ANNUAL MEETING HELD AT CHICAGO, ILL., JUNE, 7–10, 1887.

BY GEORGE H. ROHÉ, M.D., OF BALTO., MD.

Professor of Hygiene in the College of Physicians and Surgeons.

Progress in any branch of science or art may be measured either by the number and character of new discoveries made, or by the gradual advances in the application of knowledge previously acquired. Judged by either of these criteria the record for State Medicine during the past year is a creditable one.

In the field of epidemiology and endemiology, the progressive extension of the fifth great pandemic of cholera first claims attention. Extinguished in the portions of Italy, France, and Spain ravaged in 1885 and 1886, it has slowly invaded southeastern Italy, Hungary and other Austrian possessions, and has been imported into South America, whence it threatens the United States by several routes. The danger of invasion of this country is at present greater than at any time within the past three years.

Yellow fever inoculation, as practised by Freire in Brazil, and Carmona in Mexico, has claimed a large share of the attention of sanitarians during the year. The claims made in favor of this method of preventing this scourge are now being subjected to an official investigation authorized by the United States government.

Diligent search has been made for the specific organism supposed to be the infective agent in vaccine virus, but without definite success. The results obtained are not entirely negative however, and one may cherish the hope that a solution of this problem will soon be reached.

The relation of a peculiar disease of cows to scarlet fever, and the discovery of a specific microbe in the blood in the latter disease have attracted much attention. The restriction of scarlet fever will doubtless be more thoroughly effected so soon as physicians are convinced of its bacterial nature, and clearly comprehend its mode of transmission. Statistics are given showing what has already been accomplished in this field.

Sternberg, Fränkel and Weichselbaum, have studied the specific microbe of croupous pneumonia, which the former regards as identical with his *micrococcus Pasteuri*; in which opinion both the other authors mentioned, coincide. Dr. Baker, of Michigan, has also shown that croupous pneumonia seems to be dependent upon a cold, dry atmosphere.

Measures for the restriction of pulmonary tuberculosis are adverted to. Tuberculous patients should not be treated in the same hospital wards with non-tuberculous individuals and prompt disinfection of the sputa and other dis-

charges should be practised in order to diminish opportunities for infection. General sanitary measures should however not be neglected in the warfare upon the bacillus. There is danger that an exclusive attention to the microbian factors of disease will narrow our views of epidemiology and preventive medicine.

It seems to be established that the micro-organism discovered in the intestinal lesions and discharges in typhoid fever is the cause of this disease. The fact that this microbe may preserve its vitality for a considerable time in water and ice has been shown by Bolton, Wolffhügel, Prudden and others. This, together with the well-known history of outbreaks of this disease undoubtedly depending upon pollution of drinking water, should make prompt measures of disinfection imperative in every case. The physician fails in his duty who neglects measures for the thorough destruction of the typhoid infection existing in the intestinal discharges.

The importance of disinfection of bedding, clothing and other personal and household articles in contagious diseases demands that health authorities should have under their control establishments where disinfection can be carried out on a large scale and at public expense. Such institutions are now in use in Berlin, Düsseldorf, Göttingen, Strasburg, Breslau, Leipzig, Danzig, and other cities in Europe. The results are pronounced to be exceedingly beneficial. Steam under pressure is regarded as the best disinfecting agent.

Quarantine, a word which for more than five centuries has been synonymous with barbarism, is becoming under modern methods a safeguard to the public against infection and an advantage instead of obstruction to commerce. The results achieved at the model quarantine station at New Orleans encourage the hope, and almost warrant the prediction that the days of the quarantines of detention, whether by sea or land, are past, and that quarantine in future will mean simply *thorough disinfection* of fomites, and, of course, effective isolation of persons already infected.

Cremation of garbage seems to be the best method yet devised for the inoffensive destruction or final disposal of solid city wastes.

The irrigation system of sewage disposal has steadily won favor. In Berlin, Breslau, and Danzig, in Germany, Birmingham in England, and Pullman and other places in this country it has been in successful operation. Chemical precipitation and purification of sewage has also been adopted with satisfactory results in various German cities. A board of distinguished engineers recently recommended the same system for the city of Providence, R. I.

Professors Vaughan's discovery of a very poisonous ptomaine in cheese, ice cream and milk undergoing certain chemical changes has been confirmed by a number of investigators in various parts of the country. Vaughan's suggestion that tyrotoxicon may be found to be the poison which produces cholera infantum opens up a new field for investigation in which every physician must of necessity be interested.

Analysis of food and drugs made during the year in Massachusetts and New York, show the wide extent to which adulteration is practised and how the people are defrauded. Among the most startling instances are olive oil of which 68 samples out 91 were spurious. Vinegar was adulterated in 79 samples out of 116; mustard 124 times in 211; white pepper 63 times in 128; black pepper 41 times in 71; mace 29 times in 45. Of nine samples of horseradish examined only one was found genuine. A precipitate of uncrystallizable sugar and coloring matter and chloride of tin (poisonous) is sold to candy makers for making confectionery. Citrate of iron from respectable manufacturers contained 3½ per cent. of quinine instead of the 12 per cent. demanded by the pharmacopæia. Authority and means should be given to the health authorities to protect the public from these frauds, many of which are a source of danger to life and health.

Statistics collected by the speaker

show that five sixths of the inhabitants of cities in this country have no facilities for bathing except such as are afforded by a pail and sponge, or an easily accessible river, lake or other body of water. The establishment of public baths is urgently recommended both as a sanitary as well as moral measure. Tub or pool baths are objectionable both on account of expense and lack of privacy in the latter. The spray baths in use in the German and French army barracks are recommended. These are not expensive, either in first cost or administration, and allow each bather absolute privacy and the opportunity for a thorough cleansing in clean water. Public baths should be open the year round, and not only during the summer.

A number of instances are grouped together showing how the enforcement of appropriate sanitary measures has saved life. In Michigan the saving of life from one disease (scarlet fever) has amounted during the lást eleven years to 3,718 or 338 per year. In 1886, appropriate sanitary measures saved the the lives of 298 persons who would have died of diphtheria, if such measures had not been enforced. In England and Wales, the average annual saving of life due to sanitary measures has amounted in the five years ending 1885, to 62,000. In Baltimore, a marked reduction of deaths from infectious diseases has followed the enforcement of certain sanitary precautions. In Memphis the death-rate has been reduced in six years from 35 per thousand to 23.80 per thousand. In Chicago the reduction in mortality in the last five years has been from 25.69 per thousand to 19.46 per thousand, a net saving of 17,214 lives in that city during that period.

While all advances in sanitary administration have doubtless contributed to produce these good results, the main influence is to be attributed to three factors. These are *compulsory notification of infectious diseases; prompt and effective isolation of the sick and infected, and thorough disinfection of all infected articles and sources of infection.* These must be the watchwords of the practical sanitarian of the future.

Society Reports.

AMERICAN CLIMATOLOGICAL ASSOCIATION.

FOURTH ANNUAL MEETING.

The fourth annual meeting of the Association was held in the John Hopkins University, Baltimore, Md., May 31st, and June 1st., 1887.

TUESDAY MAY 31ST.—AFTERNOON SESSION.

The Society was called to order by the President, DR. FRANK DONALDSON, SR., of Baltimore who delivered the

PRESIDENT'S ADDRESS.*

DISCUSSION.

Dr. J. C. Wilson, of Philadelphia, thinks the position taken by the author is what all should agree to, but we know it is not accepted by all. Pulmonary tuberculosis in all its forms is in all probability an infectious, parasitic disease directly contagious.

Dr. B. F. Westbrook, Brooklyn, the physiological conditions which predispose to this trouble are, according to the results of certain observations, a disproportion between the heart and lungs,the heart being smaller in proportion to the size of the lung than in the ordinary individual, and a disproportionately small digestive apparatus. The former condition interferes with the circulation at the apices while the latter causes a lack of nutrition.

Dr. J. R. Leaming, New York, read a paper on

THE PHILOSOPHY OF CLIMATIC TREATMENT OF DISEASES OF THE CHEST.

It is observed that the greatest improvement takes place during the first three weeks of the patient's stay at a new place. The suggestion was made

*See MARYLAND MEDICAL JOURNAL June 4, and 11, 1887.

that a line of resorts be established along the Atlantic sea coast. The patient could begin in the summer at the most northern and gradually pass southward making a stay of a few weeks at each place. Having completed the series, the patient may return taking the stopping places in a reverse order. This same plan might be applied to the Pacific coast and to the mountains. The speaker also suggested the propriety of State and municipal authorities furnishing natatoriums for the benefit of those unable to avail themselves of the advantages of existing institutions.

Dr. G. L. Curtin, Philadelphia, read a paper on

THE INFLUENCE OF SEA AIR ON SYPHILITIC PHTHISIS.

The speaker gave the history of five cases of syphilitic phthisis in which improvement followed prolonged sea voyages and in each case the symptoms returned when the patient again took up his residence on land. He was led to consider them cases of syphilitic phthisis for the reasons that there were no symptoms of chronic pneumonia preceding the attack, that the lung trouble followed syphilitic infection with constitutional symptoms, that the disease was influenced to some extent by constitutional treatment and that there was no tendency to tuberculosis in these cases. He referred to the observations of Dr. Wm. Porter, who relies on the following points in making a diagnosis of syphilitic phthisis: 1. Abundant expectoration without signs of softening. 2. A debilitated condition, without marked emaciation and a rational history of phthisis. 3. Pronounced dyspnœa without evidence of cardiac or pulmonic obstruction to the circulation. 4. Pain along the sternum and the tiabia crests, and 5. The satisfactory response to treatment. Dr. Porter had examined the sputa in one hundred cases of phthisis without finding the bacillus. The speaker was not prepared to say why it was that the sea air proved beneficial in these cases, while in most of the ordinary cases of phthisis residence on the sea coast was not desirable.

DISCUSSION.

Dr. E. T. Bruen, Philadelphia, it is desirable that we should have correct views with regard to the influence of sea air on pulmonary affections. It is probable that in syphilitic phthisis the benefit of the sea air is due to its influence on the catarrhal processes. In catarrhal affections of the mucous membranes in general it has seemed to me that residence at the sea shore was useful. On the other hand in tubercular phthisis it has seemed to me that the influence of sea air was disastrous. I am led to make these remarks because I find so many patients with this recommended to reside at the sea shore or to take ocean voyages. I have found that these cases benefitted by prolonged sea voyages are those in which there is no inherited tendency to tuberculosis.

Dr. V. Y. Bowditch, Boston, I should make a great distinction in speaking of the sea coast air and the pure air. Cases which could not stand the harsh cold and changeable air of the sea coast may be benefitted by a sea voyage or residence on an island some distance from the shore where the conditions are similar to those which are obtained in a sea voyage.

Dr. F. I. Knight, Boston, while I am sure that the general feeling is that the coast climate is not suitable for cases of phthisis, yet in several instances I have known patients to improve and gain in weight during a stay at some of the coldest resorts on the New England coast.

Dr. J. C. Wilson, Philadelphia, I have had no experience with syphilitic phthisis, but with reference to residence at the sea coast in the treatment of phthisis I would say that in my experience there are three classes of patients with consumption who cannot go to our exposed Atlantic sea coast without risk. These are, first, those in whom there is active febrile disturbance; secondly, those of a highly excitable and nervous organization, and thirdly those who suffer from repeated attacks of spitting of blood.

Dr. F. C. Shattuck, Boston, the author has referred to destructive processes in the

lung not due to tubercle but to the syphilitic virus. It seems to me to be a difficult matter to determine whether or not there is such an affection. Tubercular phthisis varies so much in its symptoms that the points mentioned, I think, cannot be relied on. It seems to me that the criterion would be the presence or absence of the tubercle bacillus. The author referred to Dr. Porter as having examined the sputa from one hundred cases of supposed syphilitic phthisis without finding the bacillus. That number is so large for the short time that this test has been available that it would make us a little doubtful of the methods employed. The fact that the bacillus is not found is no proof that it is not present. The German Committee on the Collective Investigation of Disease studied this matter last year and came to the conclusion that so-called syphilitic phthisis had no real existence. Both syphilis and tuberculosis are common diseases and the one offers no immunity from the other so that we should expect to frequently find them combined in the same individual.

Dr. J. H. Musser, Philadelphia, I have never seen a case of phthisis which I considered of syphilitic origin. In my experience in the post-mortem room I have come across only one case in which the lesions bore any resemblance to what we should expect to find in syphilitic phthisis. This was the case of a young man with syphilis and cirrhosis of the liver due to syphilitic interstitial hepatitis. There were also syphilitic gumma in the brain and the patient died of syphilitic meningitis. There were scattered through both lungs innumerable miliary granules not at all resembling miliary tubercles. These were solid bodies which made up at least one-half of the nodule. The microscopical examination showed these bodies to consist of a ring of firm fibrous connective tissue in the centre of which there were degenerating cells. We were unable to find the bacillus of phthisis, but as has already been stated the failure to find it is no proof of its absence. I should not call this a case of syphilitic phthisis, but rather a case of syphilis of the lungs.

Dr. E. Fletcher Ingalls, Chicago, I have been much interested in the remarks of the gentleman from Boston, but I apprehend that most of us have seen cases in which the syphilitic nature of the disease admitted of no question. Even if the bacilli are found it would be no proof that the case had not originated as a syphilitic trouble and that it had subsequently become tubercular. I recall one case in which the syphilitic manifestations are very prominent. These are consolidation of the lungs particularly of the middle portion of one lung. There was a history of syphilis and distinct cutaneous lesion. The patient had been in Colorado and returned much worse. On his return to a lower altitude he was put on the use of iodide of potassium and ultimately apparently recovered.

Dr. J. H. Musser, Philadelphia, read a paper on

THE TREATMENT OF THE FINAL PHTHISIS.

The paper consisted of a detailed account of the symptoms met with in the last stages of phthisis and referred to the various measures which he had been useful in these cases. To relieve the high temperature he had resorted to antifebrin with advantage. Quinine was found to act unsatisfactorily.

EVENING SESSION, 8 P. M.

Dr. Frank Donaldson, Jr., Baltimore, read a paper on

CAUSES OF CARDIAC FAILURE IN HIGH ALTITUDES.

The important fact that there is often great dyspnœa and sudden cardiac failure in going to high altitudes has not been sufficiently emphasized. Many patients are sent for general or special reasons to high altitudes and are thereby done great injury, especially if they suffer from any from of functional or organic heart disease. From some experiments with the pneumatic cabinet the author had come to the conclusion that this treatment should not be em-

ployed in cases in which there is any valvular disease of the heart or fatty degeneration of its walls. Before being subjected to the treatment in the cabinet an examination of the heart should always be made. It has been asserted that the cause of the cardiac failure in ascending to high altitudes is the want of oxygen. The speaker had performed certain experiments with reference to this point. At altitudes within ten thousand feet there is sufficient oxygen to supply the hæmoglobin. In ascending to high altitudes the pressure of the air within and without the lungs is the same, but on the heart the action is different. The pressure is removed from the outer surface of the heart while the internal blood remains the same. There consequently must be dilatation of the heart walls. This in the author's opinion was the cause of the heart failure under these circumstances.

DISCUSSION.

Dr. B. F. Westbrook, Brooklyn, I have no doubt that the explanation of the author with reference to the effect of high altitudes on the heart is correct, but in the pneumatic cabinet, the conditions are different. Where the patient inhales compressed air or sits in a rarified atmosphere and inhales at the ordinary pressure, there is an absolute or relative increased pressure within the thorax. The heart is therefore submitted to a relatively increased pressure. As a matter of practical experience, I have found that patients with mitral stenosis or without regurgitation with pulmonary congestion can be put in the cabinet with safety. I should hesitate very much before putting a patient with aortic regurgitation into the pneumatic cabinet. In mitral disease, however, the tendency is to assert rather than exhaust the diseased heart.

Dr. H. F. Williams, Brooklyn, certain New York observers have claimed that in weak heart, particularly the "tobacco heart" they have obtained with the pneumatic cabinet an affect similar to that of digitalis, due probably to a stimulation of the circulation through the coronary arteries.

Dr. S. S. Cohen, Philadelphia, the heart is habituated to a certain pressure of the atmosphere (754 mm. of mercury). When the individual goes into a rarer atmosphere there is a disturbance of the relationship between external and internal pressure and this disturbance will necessarily bring upon the patient disease. The inhalation of compressed air in cases of dilated heart has been recommended by Waldenburg and others. I have recently employed this measure with beneficial results in alleviating the dyspnœa and defective circulation due to a dilated heart.

Dr. J. T. Whittaker, Cincinnati, O., the condition met with in a rarified atmosphere cannot be compared with that met with in the pneumatic cabinet. It does not seem possible to exert any mechanical pressure upon the heart in the cabinet. The conditions which have been observed admit of easier explanation by a study of the effects on the surface vessels. When the pressure is removed from the superficial vessels the dilated heart propels the blood easier than before. This is one of the most efficacious means of treating irregular heart. I have used the cabinet for two years and have seen no ill effects from its use, although I should not subject a patient with advanced cardiac disease to this plan of treatment.

THIRST IN YOUNG INFANTS.—It is a mistake to suppose that because milk is a liquid food it is at the same time a drink which is capable of satisfying the thirst of infants. Although milk appeases hunger, it makes thirst more intense after it has remained some time in the stomach and digestion of it has begun. It is thirst which causes healthy, breast-nourished infants to cry for long periods of time in many instances. There are many cases of indigestion due to weakness or insufficiency of the child's gastric juice which would be greatly benefited or even cured if the child were allowed an occasional drink of water.—*Med. Rec.*, May 21, 1887.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL, *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JUNE 11, 1887.

Editorial.

THE ART OF SURGERY.—ITS PROGRESS.—During the past quarter of a century the art of surgery has made no less marked progress than the science of surgery. This has been shown by the numerous mechanical apparatus and operative methods which have been called into use for the correction of deformities and for the removal of unsightly physical defects. The club-foot, the humpback, the strabismus eye, the unsightly nævus, have each received the finishing touches of the surgical art and in corresponding degree have been thereby improved. Not only has the art of surgery contributed in this manner to the comfort and usefulness of individuals by correcting deformities and abnormalities, but it has gone farther in that it has produced results which are beneficent not only to the individual himself, but to his immediate associates and to his fellow men. The art of surgery has now become not only eminently useful but it has gone a step farther and is fast becoming, so to speak, eminently artistic. Thus, for example, surgery now not only aims to restore comfort and to prolong human life by its beneficent administrations but it has reached a position in which it makes use of the higher principles of art in correcting physical defects of a minor degree which impair the expression and features of the individual's face. The oculist has changed the expression of the features by his work on the eye, the oral surgeon has transformed an unshapely mouth, the laryngologist has improved the quality and tone of the voice by his manipulative skill within the larynx, whilst the rhinologist has so vastly improved the shape of the nose that the hitherto homely individual has been transformed physically into a shapely object.

It is no exaggeration to say that the finishing touches of these several surgical artists, respectively designated as oculist, dentist, laryngologist and rhinologist, have greatly improved the comfort as well as appearance and usefulness of many individuals. Not only so, but these different surgical artists are yearly improving the character and quality of their work, as well as enlaging its scope. Where the limit to the application of their art will end we dare not venture to even surmise. Certainly it has not near reached its final accomplishment. Now whilst the above named artists have worked with marked enterprise and skill in their respective fields and have produced results of the most satisfactory character, a notice of the art of surgery will be incomplete without some reference to the work of the dermatologist and general surgeon in this same direction. It is well-known what the dermatologist is doing in the direction of improving the healthfulness, beauty and color of the skin, how he has transformed a freckled, acne-dimpled countenance into one of comely appearance and rosy tint.

To the general surgeon has been delegated the supervision of the entire field. His artistic touches may be seen here and there correcting a squint, straightening a curvature of bone or joint, removing unsightly objects and by various methods applying his art to produce the most artistic as well as practical results. The most hopeful sign of the further development of the art of surgery is found in the fact that the surgeon is not satisfied with ordinary results, that he not only aims to restore nature to her original design—perfect in symmetry and function—but even goes farther and attempts to improve upon nature where

she is at fault. He brings his art to bear upon human tissues with the same nicety of detail that the artist applies his touches to the canvas. He sees in his art the means of producing effects and results as useful as they are true and correct in form and expression. It is no ideal vision which presents a view of the surgical art far in advance of the practice of to-day. What has been done within the past twenty-five years will scarcely bear comparison with the results possible of attainment within another quarter of a century. The art of surgery is certainly still susceptible of vast improvement and it is in this direction that the surgeon will find abundant opportunities for the exercise of his skill, ingenuity and painstaking labor. This improvement of the art of surgery will constantly open up new avenues for the performance of surgical work. Just as the the telphone and the electric light have become necessary adjuvants to the needs of human society in its onward progress, in like manner will this higher art of surgery find its patrons and receive its full recognition at the hands of a public which is ever reaching for objects which contribute to its vanity, amusement or comfort.

The progress of surgical work in the direction which we indicate is quite noticeable to one who keeps pace with current medical literature. In illustration of this fact we have before us an interesting paper with this title, "The Deformity Termed 'Pug-nose' and its Correction by a Simple Operation" (*Med. Rec.*, June 4th, 1887). In this paper, the author, Dr. John O. Roe, of Rochester, N. Y., discourses in a very interesting way on the beauty and importance of the nose, and on its defects and malformations, conditions which operate to produce them and methods of overcoming them. Dr. Roe then illustrates with photographs from life the vast improvement which can be made in the form, appearance and use of the nasal appendage by a simple operation. He classes this operation with the operation for strabismus, which is mainly to improve the personal appearance of the individual. The operation consists in removing from the end of the nose that tissue which is in excess, or which is disproportionate in amount to the other portions of the nose. The results presented by Dr. Roe are exceedingly good and go to show that as an artist and at the same time surgeon, he has suggested a line of work which is likely to be not only very popular with a large class of individuals but likewise vastly improving to their personal appearance.

Miscellany.

Retention of Fœtal Membranes.—In the *Jürnal Akürsherstvr i Jenskikh Boleznei* (the organ of the St. Petersburgh Gynæcological Society, edited by Professors A. I. Krassowski, K. F. Slaviansky, and I. I. Smolsky), vol. i, fasc. i, 1886, p. 1, Professor I. P. Lavarevitch, of Kharkov, discusses the subject of retention of fœtal membranes, arriving at the following conclusions: 1. Retention of the decidua with the chorion is a common occurrence, and has no special importance. 2. On the other hand, retention of the amnion or of portions of the placenta occur but rarely, and are apt to give rise to dangerous symptoms, such as decomposition leading to inflammatory œdema, swelling and softening of the uterine walls, lochiometria, etc. 3. The conditions tending to produce retention of the decidua with the chorion are the following: (*a*) late rupture of the fœtal membranes; (*b*) their adhesion to the wall of the uterus owing to the overgrowth of the chorionic villi at some spot, to decidual hæmorrhage, giving rise to fibrous adhesion, or to endometritis and choritis, etc.; (*c*) their early separation from the amnion; (*d*) finally, their abnormal friability. 4. Retention of the amnion, on the other hand, is favored by an early rupture of the fœtal membranes, by a low situation of the placenta, by operative manipulations within the uterine cavity, by anteflexion of the womb, by thinness, congenital or pathological, of the membrane in question, and by adhesion. To prevent retention of fœtal membranes, Professor Lazarevitch recommends that

the placenta should be removed only after straightening the womb (which bends forwards after expulsion of the fœtus). — *British Medical Journal*, April 9th, 1887.

Mortality in Public Lying-in Hospitals of Germany.—Döhrn, in *Zeitsch. f. Geb. und Gyn.*, p. 121, 1886, draws attention to the great diminution in the mortality of lying-in women which has taken place in the above-mentioned establishments since the introduction of antiseptics. He selected the period of 1874-83, since in 1874 antiseptics were scarcely used anywhere, while in 1883 they had become very general. The total number of cases of labor was 104,-289, and 1,529 women, or 1.37 per cent., died. The vast improvements indicated by this percentage will be clear on comparison with the statistics of previous years. Thus, in 1866, Lefort found the average mortality in the lying hospitals to be 3.4 per cent., while Winckel, in 1869, calculated the mortality on 500,-000 births to be 3 per cent. Even this great improvement, however, in lying-in institutions leaves their mortality far behind that of women attended in private practice; in the latter the percentage of deaths is only 0.6 to 0.7 per cent. Various influences contribute in bringing about this result.—*Med. Rec.*

Erysipelas and Thick Chalk Ointment.—Sir Dyce Duckworth, M.D., recommends an ointment of equal proportions of prepared or precipitated chalk and benzoated or purified lard, the lard being previously melted before the addition of the chalk. A half drachm of pure carbolic acid may be added for each ounce of ointment. When prepared with the precipitated chalk it is pure white, that made from the *creta preparata* being a putty color; both are equally serviceable. The ointment is applied with the finger and smeared thickly over the erysipelatous part, a mask of plain or boracic lint being secured over this. In severe cases it may be necessary to apply the ointment twice or more in the twenty-four hours. The writer speaks highly of the method and says it is the favorite one in the erysipelas wards of St. Bartholomew's Hospital.—*Practitioner.*

An Almost Painless Method of Introducing the Catheter.—Dr. John A-Stamps recommends (*Medical and Surgical Reporter*) the following as an almost painless method of introducing the catheter, when there is a hyperæsthetic condition of the urethra. His plan consists in introducing the nozzle of an ordinary male urethral syringe, previously filled with water as warm as the patient can bear, into a soft catheter, and injecting the water slowly as the catheter is gently passed along the urethral canal. The water regurgitates between the catheter and the urethral wall until the catheter has reached the prostatic portion of the urethra, and there is thus little danger of much water passing into the bladder, and the warmth of the water will, in many cases, serve to allay irritability, which so often interferes with the performance of catheterization.

Report of a Case of Ventral Hernia Successfully Treated by Operation, with a Suggestion as to the Method of Operating.—Dr. J. Edwin Michael, of Baltimore, read a paper before the American Surgical Association having the above title, of which the following is an abstract:

A stout woman, forty-five years of age, had a ventral hernia, and on account of the great annoyance exerienced in the use ot pads and bandages, she insisted on an operation. March 15, 1886, a free incision was made in the median line. The sac was carefully separated from surrounding tissues, and was then emptied of its contents and opened. The sac was cut off close to the margin of the ring. Strong silver-wire sutures were passed, a little less than half an inch apart, having a hold of half to three-fourths of an inch. The sutures included the peritoneal, muscular, and tendinous structures only. These were twisted, and perforated shot employed. The wire was then cut off close. The skin and subcutaneous tissues were se-

cured with catgut sutures. The wound united rapidly. In October examination of the wound showed it to be firmly united. The sutures could be felt, but gave no inconvenience. In his remarks the speaker stated that his object in using the wire sutures in this manner was the expectation that they would be surrounded by a mass of cicatricial tissue, making a permanent closure of the ring. As far as he was aware he had used the wire for this purpose without precedent.

Methylal.—In a preliminary note in the *Vratch*, No. 10, 1887, p. 227, Dr. M. Motrokin, of Professor V. K. Anrep's laboratory in Kharkov states that he has made a number of experiments on men, dogs, rabbits and frogs, as to the physiological action of methylal, the new hypnotic, to which attention has lately been called by Dr. Personali. The following is the mode of preparation. A mixture of 1 part of methyl-alcohol, 1½ parts of pure concentrated sulphuric acid, and 1½ parts of water, is subjected to distillation. The distillate is purified by treating it with potash, filtering and re-distilling with chlorinated lime at 42°C. The product obtained is pure methylal. It is a light, colorless, easily evaporating fluid of a pleasant aromatic odor, somewhat resembling that of ether and chloroform. It is neutral in reaction, and has a specific gravity of 0.8605 at 20° C. It is easily soluble in water, alcohol and oils. The results of Dr. Motrokin's experiments may be summed up as follows: 1. When inhaled, methylal produces sleep, which ceases soon after discontinuing the inhalation. 2. Sensibility to pain is diminished during sleep. 3. The respiratory movements become slower and deeper, but remain regular. 4. Methylal does not seem to have any influence on the heart. 5. In man, the inhalation of two ounces of the drug gives rise to anæsthesia, which is especially marked about the head, and to a state of light intoxication. No unpleasant secondary effects are observed either during or after narcosis. 6. The drug causes a diminution of reflex action, and lessens the irritability of the cerebral cortex. 7. It neutralises the spasmodic action of strychnine and picrotoxin, when these substances have been given in moderate quantity. When the dose of the alkaloid is large, methyl hastens the fatal issue, since in that case it has also been given in poisonous doses. Hence methylal can have only a limited sphere of usefulness as an antidote. 8. The drug is administered either internally or through the lungs. Subcutaneous injection of it is very painful, and often gives rise to local gangrene of the skin. With reference to Dr. Motrokin's paper, Dr. Serges Popoff, of Professor P. P. Sushtchinsky's laboratory, writes (*Vratch*, No. 11, 1887, p. 258) that, as far as his own researches show, methylal is far from having no effect on the heart. On the contrary, it considerably retards the beats of that organ both in frogs and warm-blooded animals; it appears to act directly on the cardiac muscle and its ganglia. Moreover, the drug causes slowness and difficulty of breathing, which are dependent upon the action which it exerts on the central nervous apparatus. On the whole, Dr. Popoff is inclined to think that the use of methylal in practical therapeutics will be attended with certain difficulties.—*British Med. Jour.* May 21, 1887.

Treatment of Varicocele. — Dr. Thiriar, of Brussels, in a clinical lecture on the "Surgical Treatment of Varicocele," after mentioning that numerous methods of operation were in former times proposed and practised—such as castration, the section of the vas deferens, and the ligature of the arteries of the cord, which necessarily interfere with the functional activity of the testis—spoke of the modern or therapeutic method as consisting essentially in the arrest of the circulation in the venous plexuses surrounding the vas deferens. Until quite recently, however, so many accidents—some of them fatal—followed operative procedures of this kind that many surgeons objected to resort to them for an affection which, however trying to the patient, cannot be consid-

ered as dangerous to life. Since the adoption of antiseptics, the danger of these operations has been reduced almost to *nil*. The operation practiced by Dr. Thiriar is the combination (proposed by Guyon) of Sir A. Cooper's plan of excising the varicose veins themselves; Heurteloup's plan of excising a flap of skin from the posterior surface of the scrotum he does not approve of, following Guyon and other surgeons in believing that the varicose condition is usually in the anterior plexus. His plan is as follows: An elliptical flap of the skin is excised from the front of the scrotum, and the bundle of veins dissected out and tied in two places, the intermediate portion being excised if the tumor is considerable. The dissecting out of the veins is a somewhat difficult matter, as there are several fibro-cellular layers to divide or tear through; the artery has to be carefully separated from the veins, a proceeding which up to the present time Dr. Thiriar has not found attended with difficulty. The wound is washed with a corrosive sublimate solution, and the lips united by a continuous suture, which is the form Dr. Thirar prefers as a rule; antiseptic dressings and in a few days the patient is discharged permanently cured.—*Lancet*, April 30, 1887.

Corrosive Sublimate in Intra-Uterine Irrigation.—Dr. Braun, from recent observations, has arrived at the following conclusions concerning the use of corrosive sublimate in irrigation of the uterus and vagina: 1. Vaginal or intra-uterine irrigation is frequently followed by absorption of the injected liquid; 2. When this occurs mercury is quickly detected in the fæces; 3. If the return of the injected liquid be in any way prevented, absorption occurs rapidly; 4. The 1 in 1,000 solution of sublimate should be used only in serious cases, such as tympanites of the uterus, putrefaction of the fœtus in the uterine cavity, or septic puerperal fever. The injection should not occupy more than a minute in the performance, and should be followed by a copious injection of distilled water. 5. The 4 in 1,000 solution should be injected only in cases of expulsion of the fœtus in premature delivery; 6. This solution may be of service in puerperal endometritis, accompanied by a fœtid vaginal discharge; in these cases irrigation should be followed by injection of pure water; 7. Irrigation should be performed only by a medical man; 8. Irrigation with corrosive sublimate should seldom be employed in women suffering from extensive wounds of the vulva, in those who have been taking mercurial preparations, in cases of atony of the uterus, in anæmic women, or in patients suffering from disease of the kidneys.—*British Med. Jour.*, May 21, 1887.

Quinine in Albuminuria.—In the *Bulletin Médical des Vosges*, M. Parnet reports a case of albuminuria that was rapidly cured by the administration of quinine. The patient, a coffee-house keeper, aged 37, habitually enjoyed good health. On going to bed after a long walk in the country was seized with chills, which were followed by fever. Subsequently, bilious vomiting set in, with sleeplessness and loss of appetite. There was great emaciation; the skin remained dry. Pressure over the gall-bladder produced great pain. The pulse was 72. Examination of the urine revealed a considerable quantity of albumen, but no sugar. As the patient also suffered from worms, one gramme of calomel was given, together with a small quantity of opium. On the following day the urine was found free from albumen. It was then discovered that the albumen was intermittent, and of the tertian type. Seventy-five centigrammes of quinine were administered to the patient daily, with the remarkable result that the albumen disappeared as if by enchantment. The treatment, however, was continued in progressively decreasing doses for several days, when the patient entered on a period of convalescence.—*Brit. Med. Jour.*

The Primary Anæsthetic Stage of Ether.—Dr. John H. Packard, surgeon to the Philadelphia Hospital writes as follows in the *Polyclinic;* "I would

like to say a few words about giving ether for its first anæsthetic effect. This man is now entirely himself. He will have no vomiting, no headache, and will be perfectly comfortable. The effect of of administering ether in this way is much like nitrous oxide. Its advantages are very great. A man comes into your office with a painful abscess of the finger and you propose to open it. If you give ether to full insensibility, you have to keep him in your office for two or three hours, which is a great inconvenience. If you do the operation at his house, he has three or four hours of headache and discomfort, whereas, if you give ether to the first insensibility he recovers immediately and perfectly. You can let him sit down and hold one hand up while he holds the ether sponge himself. When the hand drops you have a period of from thirty to ninety seconds, in which the man is in a state of insensibility, during which time you can open an abscess, or reduce a dislocation, or perhaps even replace a hernia. In a few minutes the man is fully recovered, and is able to walk away. I think that this method of administering ether is absolutely free from danger. It has been objected by good authorities on the subject of anæsthetics, that partial anæsthesia is always a condition of peril. Very good; but you do not keep the patient in a state of partial anæsthesia. You simply take advantage of a stage through which he must pass, and therefore you do not add in the least to the danger."—*Boston Med. and Surg. Journal.*

THE TABLES TURNED.—Sir Astley Cooper had the tables turned on him by an Irish candidate before the Examining Board of the London College. Asked Sir Astley—"What is a simple and what is a compound fracture?" "A simple fracture is when the bone is broken, and a compound fracture is when it is all broke," was the answer. "What do you mean by all broke?" asked Sir Astley. "I mean" said the Irishman, "broke into smithereens, to be sure." Said Sir Astley—"I ventured to ask him what was 'smithereens.' He turned upon me with intense expression of sympathy upon his countenance—'You don't know what is smithereens? Then I give you up!'"—*Medical Register.*

Obituary.

IN MEMORY OF THE LATE DR. JOHN S. SMITH, OF DUNKIRK, MARYLAND.

A meeting of physicians was held at Chaneyville, Md., May 25th, 1887, in memory of the late Dr. J. S. Smith.

Dr. T. M. Chaney called the meeting to order by nominating Dr. Hammond Stewart President, and Dr. Sumter Griffith Secretary, who were unanimously elected.

On motion of Dr. W. L. Smith the President appointed a committee (Drs. Chaney, Ireland and Paddy) to draw up resolutions. The Committee, through Dr. J. F. Ireland, reported the following resolutions:

WHEREAS It has pleased Almighty God in His All Wise Providence to take from our midst our worthy friend and brother, Dr. J. S. Smith, with whom we have been closely associated, socially and professionally, for many years—by whose professional skill and ability we have been often aided and sustained—and for whom we entertained and cherished a cordial regard of personal friendship and esteem. Therefore,

Resolved, That while we deeply deplore and regret the event of his death, and loss to his *family* and *friends*, we deem it to be in accord with a gracious sense of Christian obedience to bow in reverence and humble submission to the will of Him who gave and who has taken away, and with feelings of most profound sorrow we sincerely sympathize with his family and friends in their sad bereavement.

Resolved, That a copy of the proceedings be sent to the family of the deceased, and that they be published in the MARYLAND MEDICAL JOURNAL and Calvert County papers.

The resolutions were unanimously adopted, after which the meeting was addressed by the President, Drs. Chaney, Ireland and Griffith, all of whom spoke in the highest terms of Dr. Smith as a Christian and physician, worthy to be an example to all who knew him.

Medical Items.

Yellow Fever has been declared epidemic in Key West, Florida.

Professor Semmola has succeeded in founding a Chair of Clinical Therapeutics in the University of Naples, to which he has been called.

It is claimed, says *The Medical Register*, that the popular drink of the future will be milk charged with carbonic acid. It is said that milk thus carbonated will keep an indefinite length of time.

Prof. Billroth has been dangerously ill. He suffers from a fatty heart and great exhaustion. At one time his life was despaired of, but his illness has recently taken a more favorable turn.

Prof. Da Costa strongly recommends gallic acid in *hæmoptysis*, but advises it to be given in doses of gr. xv-xx every fifteen minutes "until the blood turns black." It is of no use whatever in small doses.—*Col. and Clin. Rec.*

For *mitral stenosis*, Prof. Bartholow advised that caffeine in gr. iij doses be given three or four times daily; to improve the general nutrition, gtt. j-v of dilute nitroglycerine, to determine the dose by the effect.—*Col. and Clin. Record.*

Drs. J. J. Chisolm, John Morris, John Lynch, Thos. Opie, T. B. Evans and Geo. H. Rohé, of this city, were delegates in attendance upon the meeting of the American Medical Association held in Chicago during the present week.

One of the latest ways of entertaining a medical society is to give a theatre-party followed by a supper. This was done recently by Dr. Lefferts, of New York, who entertained the American Laryngological Association at the Casino and after the performance repaired to Delmonico's.

Dr. Rush S. Huidekoper, head of the veterinary department of the University of Pennsylvania, has recently performed the operation of enucleation of an injured eye upon a dog, and successfully adapted an artificial eye to the socket.—*Med. and Surg. Reporter.*

Professor Ball's treatment of the morphine habit consists, first, in placing the patient under strict watch in a maison de santé; second in taking away the morphine more or less completely; third, in giving hypodermatic injections of sparteine to relieve the cardiac depression. Sometimes a little morphine is added, and sometimes nitroglycerine is given also.—*Med. Record.*

A study of ten thousand physicians' prescriptions has recently been made by the editor of the *Chemist and Druggist*. Spirits of chloroform, glycerine, and syrup of orange-peel, are the most frequently prescribed; then comes bromide of potash, wine of ipecac, sulphate of quinine, bicarbonate of soda, liquor ammoniæ acetatis, bicarbonate of potash, and sweet spirits of nitre.—*Ex.*

The *London Medical Record* contains the fol. lowing formula, which has been used to prepare a calming and adhesive preparation, suitable for neuralgias, or tender, inflamed, or abraded surfaces. Bits of linen or silk dipped into it answer the same purpose as the so-called "court plaster:" Mastic ʒiij., balsam Peru ʒj., narcotine ʒj., chloroform ʒvj. The three first substances must be powdered separately, and then added to the chloroform.

The Crown Prince of Prussia has suffered since the first of the year with hoarseness due to a small growth on the left vocal cord. This was removed on several occasions by the electro-cautery with marked benefit. The tendency of the growth to enlarge became fully established and the question arose among the medical attendants whether the new formation should be removed by the internal method or by tracheotomy. Dr. Morell Mackenzie, of London, was called in consultation. He succeeded in removing a portion of the growth which was examined microscopically by Prof. Virchow, who pronounced it to be non-malignant. This decided the method of treatment.

Kussmaul's method of treatment of intestinal obstruction proved successful in a remarkable case reported by Dr. Paul Sandoz, of La Chaux-de-Fonds. The patient was a tabetic man, aged 35, who had suffered for ten days from stercoraceous vomiting, incessant hiccough, enormous abdominal distension with absolute stoppage of the bowels; these symptoms depended, in the opinion of Dr. Sandoz, on a temporary paralysis of the muscular coat of the intestine. The stomach was washed out twice daily for ten successive days. On each occasion this at once relieved the vomiting and hiccough for several hours, but no stool was passed till the tenth day. Dr. Sandoz has no doubt that his patient's life was saved by the treatment.—*British Medical Journal*, May 21st, 1887.

M. Dujardin-Beaumetz recommends that person suffering from biliary calculus should be enjoyned to abstain from all fatty substances and carbo-hydrates which may furnish cholesterine. Peas, in particular, should be forbidden, as they contain a fatty substance similar to cholesterine; the excessive use of meat must be avoided, and eggs should rarely be eaten. A mixed diet composed of meat and green vegetables is the best. All green vegetables may be eaten, and also potatoes. Fruit may be taken if not too sweet; pastry should be forbidden. Meals should be taken frequently in order to keep the gall-bladder at work. Wine mixed with Vichy water makes a good drink. The bowels should be kept open, and plenty of exercise should be taken.—*Brit. Med. Jour.*

Original Articles.

THE CLIMATES OF POINT PINELOS, FLORIDA; AND OF CORONADO BEACH, CALIFORNIA.*

BY W. C. VAN BIBBER, M.D., OF BALTIMORE.

Map-Notes.—These situations may be new to many of the gentlemen present; and I have several maps to show them, which I will briefly describe.

Point Pinelos, Florida, is well shown upon coast-chart No. 177, of the U. S. Coast and Geodetic Bureau. It may be called a sub-peninsula. It is called by some of its inhabitants "Florida Minor." It is a unique situation, and puts off from the main-peninsula to the south, in a peculiar way. It contains about one hundred and sixty thousand acres of land.

For the most part this land is now like a park, the trees are about twenty-five feet apart, and the land is generally high, dry and healthy. The shores are hard and are washed by the waters of two bays.

The surface temperature of the water of the Gulf of Mexico, is reckoned in the coast survey office at 87° F. Nine degrees higher than the surface water of the Atlantic ocean on the same parallel of latitude. What the winter temperature of the water is around Pinelos, I do not know.

Permit me here to make a digression from my paper, and call your attention to two facts, simply because they are curious. They are not generally known outside of the Coast and Geodetic Office. By means of ingenious diagrams, they are explained to visitors at this office, with pride, and evident satisfaction, at the laborious means by which these facts have been obtained.

1. To the west of Point Pinelos, the Gulf of Mexico becomes deep. Sigbey's deep it is called. The water is 13,000 feet deep over an area of nearly 4,000,000 of acres, with a bottom temperature of 37° F.

2. Passing to the south and southeast the water gets deeper; and yet further to the southeast, outside of the straits of Florida, and near the north coast of Porto-Ricco the water is 37,000 feet deep, with a bottom temperature of 35° F.

I mention these two facts as illustrations of remarkable geographical conditions; wishing through them, to attract your attention to the two places which are the subjects of my paper, viz.: Point Pinelos, Florida, and Coronado Beach, California, which, of themselves, are examples of remarkable geographical locations, and are said to have peculiar climates.

Coast chart 606, of the same office, shows the peninsula, "The Island," but now called Coronado Beach. It is a sub-peninsula, putting north from the peninsula of lower California. It contains about 5,000 acres, I believe, but the area under improvement now is only 1,100 acres. It is on the Pacific Coast, in latitude 32°. 42, and as it is now being largely improved demands your attention. All that I know of it I will tell you in this paper.

In the *Journal of the American Medical Association* of the 16th of May, 1885, a paper was published calling the attention of the medical profession, to the peculiarities of climate, which it was supposed might be found on sub-peninsulas.

In the paper referred to, some statements were made concerning Point Pinelos, Florida, which is one of the large sub-peninsulas of the earth.

It was therein stated, that there were peculiarities, of both air and climate, to be found at Point Pinelos, which, when they were generally known, might make it a popular winter residence.

One of the peculiarities mentioned in this paper, was an equal and agreeable temperature, seldom found associated with a sufficient rain-fall.

The average annual temperature of this point was estimated at 72° F. The average temperature for the three winter months, I have estimated at about 58° F. to 65° F., according to season, which was the nearest average, I would venture, from the data which I could get.

*Abstract from a paper read before the American Climatological Association, at its meeting in Baltimore, June 1st, 1887.

A second peculiarity mentioned, and a very important one, was that the air seems to be free from that property which produces ague-and-fever; the intermittent and remittent malarial fevers of physicians; and which is so common throughout this and other countries.

In the paper referred to, the statement was also made, that this sub-peninsula was known throughout the State of Florida, as the frostless Pinelos, and that on this account a system of hygienic building, a regular water supply, and an improved sanitary drainage, different it was supposed from that found at any other place, might be planned, and practically put into operation there, entirely regardless of the equation of ice, and that there, a city, similar to Dr. Richardson's ideal city, might be built with great advantages.

I will explain in this paper what kind of ice may be found at Pinelos, and then each one present can determine this point for himself.

In making these statements, the writer of the paper, was debtor, both to persons of high character, who reside upon the sub-peninsula, and also to others who formed their opinions from what they found there, upon personal inspection.

The growth and vigor of certain plants and trees, the general lay of the land, and the temperature of the surrounding waters, were some of the things from which these latter witnesses formed their opinions.

Those who take an interest in this subject now, or, who expect to do so hereafter, may have a curiosity to know how the sub-peninsula of Pinelos stood the test of the winter of 1886, which was a remarkable winter in Florida.

The monthly weather review, of the General Weather Service of the U. S. until recently published under the direction of the late Major-General W. B. Hazen, and now presided over by Brevet General A. W. Greely, is a work, the great value of which, is recognized by all those who take an interest in the subject of climate.

On page two in the number for January, 1886, can be found this report:

"Four areas of high pressure appeared during this month * * * only two of these passed eastward to the Atlantic Coast * * the first is probably the most noteworthy which has appeared in the U. S. in many years as it was attended by a cold wave which extended over the entire country east of the Rocky Mountains, causing unusually low temperatures, especially in the southern sections of the country. * *"

"Before the 12th of the month," says this same authority, "the cold wave had reached the gulf coast of Florida, causing in many places, a lower temperature than had been observed in many years."

I will further quote from this same authority, the official record of the temperatures around Pinelos, giving only the minimums, and leaving out the fractions.

The temperature for Pinelos itself, is given upon the authority of Mr. David W. Meeker and Mr. Henry Harrison, who have both kept a thermometric register at their homes upon this sub-peninsula, more or less constant, for many years.

For convenience I have arranged the statistics in the following way.

1st, the temperatures along the Gulf Coast (four places).

2nd, those in the interior of the State (three places).

3rd, those along the Atlantic Coast, (two places).

Thus the minimum for the year 1886, and for many years, was

GULF COAST.		INTERIOR.	
At Pensicola	14°	At Tallaheesee	12°
" Cedar Keys	15°	" Jacksonville	14°
" Tampa	19°	" Sanford	21°
" Manatee	23°		
" Pinelos	23°		

ATLANTIC COAST.

St. Augustine	17°
Merritt's Island, (Indian River)	26°

These are the minimum temperatures which occurred at places north and northeast and northwest of Pinelos during 1886.

Although the temperature at Merritt's Island, Indian River, was higher by three degrees, than at Pinelos, yet, it

is fair to say, that the wind pressure was from the northwest, and the cold wave had been warmed by the land of the entire northern portion of the State before it reached Merritt's Island.

It may be interesting to know what kind of ice they have at Pinelos, and something of the details of this remarkable cold wave.

Concerning it, Mr. David W. Meeker, of Pinelos, in a letter dated April 11th, 1886, has given the following grapic sketch.

"I saw no ice on Monday, the 11th of January when I arose, but it began to freeze after daylight and froze until noon, thermometer standing about 31°, cloudy, strong winds rather to the west of north,—a few snow flakes fell about noon. At 1 P. M. thermometer registered 33° and it warmed up to 36° by 3 P. M. Ice that had formed in tubs loosened from the sides. At 4:30 P. M. I left Mr. Malthy's with thermometer at 36°. As soon as sun went down it grew cold rapidly, and at 8 P. M. was 26°. About 10 P. M., wind calmed down, sky clear. Thermometer ran up to 28° and I thought the worst was over. But in less than a half an hour the wind sprang up from a little east of north and thermometer began to fall rapidly; and by 12:30 A. M. had fallen to 25°. The The next morning it registered 23°, wind still blowing hard from northeast. After sun rise the thermometer rose rapidly, and by 9 o'clock was above freezing, and at noon was 41° F. The extreme cold lasted about twelve hours. The winters generally are warm and pleasant with an occasional norther. Trusting that this may give you a general idea of our remarkable winter I remain yours very truly, etc.,"

DAVID W. MEEKER.

Mr. Henry Harrison, formerly of London, England, who has lived upon Pinelos many years, says: "We felt the cold very much during three nights, frost we had in January, 1866. But it is remarkable how little we suffered from it. The recuperative effects of the atmosphere are astonishing * * * I have been at the famous health resorts of northern Italy on the Riviera in December, and in Rome at Christmas time, but my impression is that few places in the world can compare climatically with Florida minor, as I venture to call this point, for the winter half of the year. The more southern end of this point, where I live, enjoys exceptional advantages as regards climate. * * Early morning here is simply divine. This very morning (April 12th, 1886) at 7 o'clock the easternly breeze was incomparably fine and refreshing."

I have with me the thermometric register kept both by Mr. Meeker and Mr. Harrison, and they show quite agreeable temperatures during the winter months.

If we compare this sub-peninsula with the sub-peninsula of Coronado Beach near San Diego, lower California, where at the present time, such large improvements for health accomodations are being made, it will be an interesting matter to decide between Coronado Beach and Pinelos, upon which peninsula the greatest climate advantages preponderate.

No decision can possibly be reached at present, but it will be a study for physicians and sanitarians in the future.

What I know concerning Coronado Beach is at present limited, but as to the rapid march of improvement, my nephew, Mr. Burnet Van Bibber, has written to me under date of April 4th, 1887, as follows: "I was upon the peninsula one year ago when it was a wilderness, dry barren and covered with brush. * * I had the honor, if it may be so-called, of running the first plough furrow across it * * Now within a year it has water piped from the mainland across the bay, also an electric cable and telephone. * * The land is laid out in wide streets, and planted with trees. A ferry every half hour, houses going up like magic, water piped to every house and a $250,000 hotel is being built upon what is called Coronado Beach.

Town lots 25x140 feet are selling for $250 to $1000 each, and upwards. This shows what energy with money can do."

Concerning the climate, the same correspondent has written: "The peninsula has a more equable climate than the

mainland. * * The working men sleep in the open air. There has been but two rains since last May. The winter, spring and fall here, are, as nearly as I can describe it, like one continual Indian summer in the east, only relieved by an occasional storm; sometimes a foggy day; with now and then strong breezes from the Pacific. We also have frosts which seem to run in streaks. The greatest charm about the climate is, the bracing atmosphere combined with a high temperature. When the thermometer reaches 90° or 100° it does not debilitate, as it does in the east."

In the advertisement sheet it is said, there is no frost, that the thermometer seldom goes over 85° or below 40°. It intimates that the thermometer is most of the time in the seventies, and I expect it is from what I have heard personally from Dr. Garnett, and Surgeon Matthews, U. S. A., Washington, who are now present. So much for the facts concerning these two remarkable places; and I feel that it may be anticipating matters by a few years; but at present, there is very little doubt, in my own mind, that these two great peninsulas, besides being resorted to for pleasure, and for many diseases also, on account of their climates; and, especially if they are improved, as it is now proposed to improve them, will be the great resorts for the diseases of the respiratory organs, and they may be the battle grounds, hereafter, upon which the proper treatment of phthisis will be fought.

I will give you my reasons for making this assertion; and such reasons as I will suggest, are intended only for physicians, because physicians will lead in the study, and must be responsible for the results.

Yesterday many valuable papers were read before this Association concerning the treatment of phthisis. They developed the fact that, some of our members were not entirely agreed about climates, and some preferred even to treat this disease (consumption) at home.

This treatment I am tempted with extreme diffidence to say is carcely up to the capabilities of the times, and to the encouragements of this Association. When Aladin hears the winds howl in the north, and sees the sleets and snow, then he wishes to leave his variegated front, and eat his meat and his eggs, and drink his milk, in the sunshine,—and who can blame him?

But, be it said, all to his honor, in America he is not selfish. Look at the drift of things? Do they not now move the poor in masses away from their squalid homes into a purer air, amidst more refreshing scenes, and give them their beef and their eggs and their milk to drink,—and the best that Aladin has—he freely gives them.

If I understand the matter properly now, it is for the climatologists to find the places, and confer with the architects, that they may build properly, and the wealth of the world will see that it is done.

The first reason I will adduce for the treatment of phthisis upon the climate of Peninsulas is this.

The real cause of phthisis, and the proper treatment of the disease, are not yet known.

2nd. There is a great desire to find out the real cause of the disease; and added to this desire, an abiding interest exists, to establish its proper treatment. The one depends upon the other.

3rd. Concerning the study of this disease, let us look at the past—consult the present—and endeavor to read the leaves of the future.

About half a century ago, the followers of Laennec sought, found, explained and taught phthisis, or consumption, by the nomenclature of crude, amorphous, milliary, dissemminated, aggregated, hard or softened tubercle, and measured the disease by the rational symptoms and the physical signs to be found in each individual case.

Now, superadded to these signs and symptoms, by the followers of Koch and other microscopists, it is spoken of, explained, studied, prognosticated and taught by the microscope, and the nomenclature is changed, to the invasion of bacilli, and its progress is measured by the number of bacilli, supposed to be making the invasion.

Once it was spoken of, as galloping consumption, phthisis florida, or acute

tuberculosis, now the tendency is, whether truly or not, to estimate the force of the disease by the greater or less number of invasionists.

Of those who follow the trend of the "collective investigations" now in progress in England and Germany, and which are so ably summed up by Dr. August Hirsh, in his hand-book of Geographical and Historical Pathology, recently issued by the Sydenham Society, the most prudent of us, will linger yet for a time, before adopting this change of nomenclature.

Yet, it is beyond doubt, a fact, that the advance has fairly begun, and the climate investigators must now industriously add their quota to the general fund of knowledge. There is no help for it, our volunteered labor is in great part associated with the treatment of this disease together with the other diseases of the respiratory and circulatory organs, and we cannot escape history, as it will be written, and recorded, concerning our labors.

In my own opinion, the observations and studies of climatologists have heretofore been wisely and judiciously, broadly scattered over the earth, but now, I think, they may, with advantage, be contracted and specialized.

For example, how many amongst us here to-day, in the discussion of this subject, will maintain that the climate treatment of well defined phthisis, or true consumption, in rigorous climates, in any large number of cases, is not a thing of the past?

It seems to me, that instinct, experience and reasoning ,combine, in searching for a pure air, in a temperate and equable climate, during the winter months. The improved facilities of transportation give ample opportunities for the advantages of changing climates with the seasons.

In this connection, it may be observed, that I have said "of well defined phthisis, or true consumption," and by this I mean to exclude the treatment of many cases of "pseudo-phthisis" which will be related outside of the profession in an off hand and general way; but I allude entirely to cases, concerning which, special diagnosticians and microscopists have agreed.

Yet, even in this or any other disease, climate is not all, go where you will. There must be provided proper shelter, food, raiment and medicines to suit the climate and the disease.

If the world wish to be benefitted in proportion to their means, they must, of necessity, harken unto the call of their leaders, and build, and prepare the way, according to the advanced study of their scientists.

Upon their part, the physicians, must consult, and try to agree upon the best places for the ends proposed.

Look over the map of the world, and show two places which offer superior advantages to these. Go to either of these peninsulas in the winter, and you will see numbers of men congregated there. Speak to one of them, and he will answer for the rest, and will say, "I was in Dacota,or in Maine—and had a cough —and I came here—and am better."

Neither one of these two peninsulas has a climate sufficiently hot to debilitate the system, or too cool to be disagreeable in winter. They might theorectically be supposed to be well adapted, in climate, to those from the further north, as well as to those from the further south.

The fact of the existence of frost, will render it necessary, in building, to make ample provision for changing the air of each shelter apartment, by forced ventilation, and of purifying it by fire.

The occasional frost may also have a good effect in keeping the air free from the ague-and-fever malaria.

Niether of these peninsula are warm enough to produce, or engender, the liver troubles of the tropics.

Moreover, they are both of them, freely accessible by land and by water, and offer to a rare extent, the full advantages of both these elements, by imparting to the air that peculiar quality which only peninsulas can give.

Besides this they afford the greatest variety of food.

From their situations, they give peculiar opportunities for the most healthful exercises, amusements, and recreations

for both body and mind to suit all tastes.

From their topography and nebular phenomina they charm the eye with extended views of earth, firmament and clouds.

And yet, so far as I know, there is a sufficient difference between them to give an interest to a discriminating study.

One of them may have an air drier than the other; and one may add the healing balsamic odor of its pine groves, to other agreeable and healthful properties of its air.

Without going further into details, let me trust that I have not fatigued you with my anticipations, and permit me to conclude with the hope, that in the future, a positive benefit may come to mankind at large, and to the influence of this society in particular, from a more elaborated and detailed study of these two choice situations, or, of situations that are even yet more fitted to the ends proposed.

Society Reports.

THE ASSOCIATION OF AMERICAN PHYSICIANS.

SECOND ANNUAL MEETING.

The second annual meeting of the Association was held in the Army Medical Museum Building, Washington, D. C., June 2nd and 3rd, 1887.

Thursday, June 2nd.—Morning Session.

The meeting was called to order at 10 o'clock by the President, Dr. S. Weir Mitchell, of Philadelphia, who delivered a brief address, in which he referred to the purpose of the Association as being purely scientific, and difficult ethical questions and medical politics have no place among the work of this society. He referred to the great desirability of making the meeting of the Congress of American Physicians and Surgeons to be called in the Autumn of 1888, a success.

Dr. R. P. Howard, of Montreal, read a paper on

CIRRHOSIS OF THE LIVER IN CHILDREN.

He reported two cases in which cirrhosis of the liver was present in children, brother and sister. He exhibited sections of the organ.

DISCUSSION.

Dr. Wm. A. Welch. I recall one case in which I made autopsy in a case of cirrhosis in a child twelve years of age. He came from the coast of Africa and suffered with malaria. Both the liver and spleen were deeply pigmented. The clinical features of the case could not be obtained. Most of the cases of cirrhosis of liver of malarial origin, have been reported from the coast of Africa. Very little has been brought forward in this country with regard to the malarial origin of cirrhosis.

Dr. F. Forsheimer, of Cincinnati. I have seen two cases that may possibly be called cirrhosis. One was that of a child of eight years. At the post-mortem the characteristic hob-nail liver was found. In this case I considered the cirrhosis due to syphilis. The second case is now under obsevation in the Children's Hospital of Cincinnati, the patient being in the last stage of cirrhosis. In this case there is a history of syphilis and the child has hereditary syphilis of the nervous system. To my mind it is clear that syphilis is the most common cause of cirrhosis of the liver in children.

Dr. William Pepper, of Philadelphia. I have the complete records of a case in which cirrhosis of the liver followed measles in a child eight years of age. There was no syphilitic history. During the attack of measles there were symptoms of hepatic disorder, as was shown by occasional attacks of catarrhal jaundice. Subsequently the symptoms of developing cirrhosis made their appearance and death from a comatose condition finally occurred. The whole duration of the case could not have been less than a year. At the autopsy a

typical hob-nail liver was found. The liver had been much enlarged but had gradually contracted so that at the time of death it was of about the normal size.

Dr. John Guiteras, of Charleston, read a paper on

OBSTRUCTIVE SAFETY VALVE ACTION IN THE HEART AND DIRECT FUNCTIONAL MURMURS.

In a previous paper, on malignant endocarditis, the author had dwelt upon the significance of mitral direct presystolic murmurs, which were proven by the autopsy to be unconnected with any lesion of the mitral orifice. The lesions were those of intense aortic regurgitation. He had attributed the murmurs to the recoil of the blood upon the mitral leaflets holding them tense against the stream of blood coming from the auricle. In the opinion of the late Dr. Flint, direct functional mitral murmurs were limited to a small number of cases of aortic regurgitation, but the author thought that functional mitral murmurs were not so rare. Obstructive functional murmurs are common in aortic regurgitation.

Pulmonary systolic murmurs are more frequent than any other form of cardiac murmurs. In examining one hundred consecutive cases he had found in sixty-two systolic pulmonary artery murmurs. In these the murmurs were present during tranquil breathing, or during respiration, in such a way as to produce changes in the pulmonary circulation. If account is taken of the bruits heard in this region the proportion becomes greater. The clearness with which these murmurs are heard depends upon the proximity of the artery, the thinness of the chest walls, the nature of the surroundings and finally the proximity of the main trunks to the capillary distribution. Systolic pulmonary murmurs can be developed in the majority of healthy individuals, if we exclude those with thick chest walls and those who are not intelligent enough to modify their breathing as directed. The author held that such a murmur was a dynamic obstructive valvular murmur, and is produced by the effect of changes of blood pressure upon the semilunar valves. A certain degree of pressure in the artery must tend to prevent the opening of the valve. This causes a slanting position of the valves and a narrowing of the orifice with the production of a sonorous whirl. The fact that such murmurs are not more frequently developed at the aortic orifice is due to the greater power of the ventricle and the wide distribution of the systemic circulation. There are, however, cases in which increased arterial tension is expressed not only by accentuation of the aortic second sound but by an aortic systolic murmur. He had heard it in atheroma and in Bright's disease, where there was no marked anæmia. Pulmonary artery murmur, as heard in ordinary breathing, is confined to the expiratory act and is loudest at the beginning of the act. The murmur is sometimes only heard with the first beat that occurs with expiration. In order to further develop this murmur it is only necessary to arrest respiration. It is better to stop breathing during expiration, especially at the end of normal expiration. A full expiration makes the murmur louder. At the end of inspiration, it is now difficult to develop the murmur for several reason, 1st, because it requires entire arrest ef respiration to produce engorgement of the main trunk; 2nd, because prolonged inspiration effort is accompanied by a continued hum of the intercostal muscles. 3rd, because the expansion of the lung interferes with the transmission of any murmur that may be present. A slight murmur is frequently heard in inspiration if the arrest of breathing is pushed fast enough. The speaker asked: Are we not justified in assuming that there is a safety valve action in this attitude of the pulmonary valve which together with the leakage at the tricuspid orifice, tends to prevent engorgement of the lungs by retardation of the flow of blood in the systemic veins, so, thus continued for a time, it does no harm? On reference to the murmurs of anæmia, the author thought that they were due to some disturbance of the

valvular apparatus. In this condition there is a marked reduction of the quantity of blood. The valves require a certain amount of expansion of the vessels in order to allow them to apply themselves to the walls. Venous hums and basic murmurs he thought to be of valvular origin.

DISCUSSION.

Dr. A. L. Loomis, New York. Many different explanations of murmurs within the heart cavities have been given. We should recognize that they are due to many different causes. Many are obstructive in character while others are due to the impinging of currents of blood upon each other in the heart. They are also due to the force with which the blood current is carried from the heart into the vessels. They are also due or greatly intensified by the condition of the blood. It seems to me that they may also be due to irregular action of the heart produced by nervous conditions. The obstructive mitral murmurs referred to are, I think, of frequent occurrence in connection with aortic disease where there is dilatation and feebleness of heart power, but on autopsy I have always found such changes in the mitral valves as seem to me to account satisfactorily for the murmurs heard. I have heard the murmurs also readily produced during respiration, but where these murmurs have been persistent, I have always found conditions of anæmia and failure of the right heart. It seems to me that the explanation is either hæmic or failure of heart power. I think that we shall, as we study the cases more, find that they are due not so much to changes in the valvular orifices as to changes in the heart cavity, and in the heart walls. Murmurs have come to be of very little pathological significance to me unless there are other changes associated with them. The worst cases of heart disease that I have met with have had the simplest and least distinct heart murmurs.

Dr. E. T. Bruen, of Philadelphia. In a case of anæmia which I have recently studied the blood corpuscles were reduced from normal to 1.800.000, with a great reduction in the hæmoglobin. There was also great relaxation of the muscular system, so much so that as the arm hung out of the bed, there was a venous pulse at the back of the wrist. This was attributed by Dr. Osler and myself to relaxation of the capillary vessels to such an extent as to permit the systolic impulse of the left ventricle to force the blood through the capillaries into the veins. There was no venous pulse in the neck. In this case there were murmurs at each of the valves of the heart. As the anæmia improved and the crasis of the blood was restored the venous pulse disappeared and the murmurs gradually lessened and the man has now no murmur whatever. This case is corroborative of the view of the author that in anæmia the murmurs are due to some functional disturbance of the valve.

Dr. F. P. Kinnicutt, of New York. It has been claimed by certain observers that pulmonary systolic murmurs are transmitted from the mitral valve into the auricular appendage. The condition required that this may occur is said to be dilation of the appendage causing it to approach the chest wall. In some anatomical examinations made a few years ago, I found that in the normal condition the auricular appendage was concealed beneath the pulmonary artery, and when fully dilated its tip only could be seen beyond the edge of the artery. It was even then one and a half inches from the internal surface of the chest.

Dr. F. C. Shattuck, of Boston. When auscultation was first introduced all cardiac murmurs were considered of bad omen. It was then discovered that many systolic murmurs were practically of no importance. We are now finding out that all diastolic murmurs are not of evil import and that they may be transitory and functional. A murmur by itself is next to nothing, there must be something beside the murmur to make it of much importance. The author has stated that in anæmia there is a reduction in the quantity of the blood. I would ask is not the reduction more in the quality, a corpuscular reduction and

a reduction in the capacity of the corpuscles for carrying hæmoglobin?

Dr. Samuel C. Chew, of Baltimore. With reference to the diagnosis between aortic regurgitant and mitral direct murmurs, I would say that I think that the diagnosis can usually be made by attention to the following points: An aortic diastolic murmur, although it may be intense at the apex, becomes manifestly louder as we reach the right side of the sternum in the second intercostal space. It will then occupy the whole diastole. If the murmur is mitral in origin it generally will be presystolic and will be also heard in the scapular region. The aortic murmur is not apt to be heard in the latter situation.

Dr. Beverly Robinson, of New York. I have occasionally found in acute strain of the heart not necessarily brought about by great muscular exertion murmurs which unquestionably had nothing to do with organic changes in the heart and can not be explained as due to any special modification in the blood. The murmurs seemed to be due to more or less acute dilatation or obstruction of the mitral orifice. These murmurs I think have considerable prognostic importance, for if they do not receive careful attention and proper treatment they may continue for a considerable length of time and then become of more or less grave import.

Dr. Israel T. Dana, of Portland. I have had under my observation two sisters, one 40 years of age and the other 33. The mother died of organic heart disease. Both of these sisters have had a mitral regurgitant murmur. In the older sister the murmur after remaining for five or six years disappeared. It remained absent for one or two years and then returned and has continued for the past two or three years. In the second case the murmur after having been present for five or six years disappeared and has since remained absent. I would ask if it is possible that a murmur connected with organic heart disease should disappear with improvement of the health and reappear when the health again fails?

Dr. Hosmer A. Johnson, of Chicago, read a paper on

PNEUMATIC DIFFERENTIATION.

In the absence of the author the paper was read by the secretary. The author had compared the results obtained by the cabinet with those obtained by the Waldenburg apparatus and he held that the former accomplished no more than the latter. The pneumatic cabinet he considered cumbersome and expensive with nothing to especially commend it in the treatment of pulmonary diseases.

Dr. John S. Billings, U. S. A., read the last paper of the morning session, entitled

METHODS OF LITERARY RESEARCH.

The author referred to the best way of using libraries with especial reference to medical literary work. He also spoke of the great importance of carefully prepared catalogues of books.

Adjourned.

AFTERNOON SESSION.

Dr. H. C. Wood, of Philadelphia, read a paper on

THE ANTIPYRETIC TREATMENT OF FEVER.

In order to make the matter as brief as possible he had prepared certain propositions which he would read and then give what he thought to be the proof of their correctness. The first proposition was. "Fever is a disturbance of calorification in which through the influence of the nervous system heat dissipation and heat production are both affected. If there be a fever which is produced by the direct action of a poison independently of the nervous system, we have at present no proof of its existence."

If an animals temperature rises, there must be a certain number of units used in producing that rise. If the temperature falls there must be a corresponding lessened production of heat. In his experiments the agent used to produce the fever has been the pyrogenic principle found in ordinary commercial pepsin. After the substance has been introduced the animal is put into a calorimetre. The

animals used in the experiments have been dogs. In the normal animal, heat production and heat dissipation are correlated functions. When the poison is injected it is found that heat dissipation increases at the time that heat production is diminishing so that the fall of temperature was in part the result of heat dissipation and in part the result of diminished heat production. It is impossible that there should be this wide disturbance of these two functions simultaneously, unless the poison which produces the fever acted upon some one central organ, and that must be the nervous system. McCallister of London while believing that fever is often produced through the nervous system thinks that at times it may be produced by wide spread tissue charge caused directly by the poison, his reasoning being that in the advanced stage of fever the temperature is higher than at the beginning. He says that the time when the poison is at its maximum does not correspond to the time when the fever is at its maximum. The objection to this argument is that we do not know that the poison of the disease is the direct cause of the fever. The poison which causes the disease in scarlet fever, etc., is probably not the poison which causes the fever. The latter is probably generated in the system.

2nd. "Heat production is regulated by a nervous apparatus our knowledge of which is still imperfect. There is certainly an inhibitory centre which depresses or controls the production of heat. It probably does this by acting upon the trophic cells of the gray matter of the spinal cord. It is possible also that there is a centre which when excited, increases tissue change but its existence has not yet been proven." The speaker then gave a resumé of the experiments which he had performed which in his opinion proved the truth of the above proposition.

3rd. "Heat dissipation is regulated through the vaso-motor system so that vaso-motor paralysis is followed by an enormous loss of animal heat and under unfavorable circumstances by death from cold." If section of the cord is made in such a way as to get vaso-motor paralysis without destruction of the respiratory centres the heat dissipation rises enormously. If the animal is kept in a temperature of 50° or 60° it dies in few hours of progressive loss of heat. If kept in a warm chamber it lives for days. The cause of the rapid heat dissipation is the opening the blood vessel of the surface of the body.

When these remarks are applied to a study of antipyretics it is seen that drugs may lower bodily temperature in health or in fever by increasing heat dissipation. In this way act all agencies which cause vaso-motor paralysis. Antipyretics acting in this way may be called false antipyretics. Then it is conceivable that there may be drugs which act on heat production through the inhibitory nerve apparatus of which mention has been made. Such drugs may for convenience be called true antipyretics. Aconite, veratrum viride and drugs of that class belong to the false antipyretics. Whether or not there are any true antipyretics has until recently been a question which we have been unable to answer. With regard to antipyrin certain experiments made in the University of Pennsylvania seem to give some positive results. Care must be exercised in these experiments not to confound a normal defervescence with the action of the drug administered. In the dog the use of antipyrine diminishes both heat production and heat dissipation, the former being diminished more than the latter. It is probable that heat production is primarily affected. The question arises whether this result is due to an effect on the circulation? He had found that antipyrine had no effect upon the circulation. The blood pressure was uninfluenced by its administration. He therefore concluded that the action of antipyrin upon the bodily heat was entirely independent of any action upon the circulation and the probabilities are of course that it acts through the nervous system. Beyond this our present knowledge does not extend.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD MAY 5, 1887.

The President THOMAS M. DRYSDALE, M.D., in the chair.

AXIS-TRACTION FORCEPS.

Dr. B. C. Hirst exhibited the forceps of von Hecker, used in the Frauenklinik at Munich. The Poullet attachment had been added to the original forceps.

DISCUSSION.

Dr. Longaker remarked that the idea of making traction by means of tapes attached through perforations of the blades was suggested by Chassaigny, of Lyons, as early as 1865.

Dr. Kelly was pleased with the forceps of von Hecker, and considered it better adapted to the Poullet tractor than the Hodge or any straight forceps. The very fact of attempting to use a long, straight forceps was an attempt to realize thus, in some measure, an axis traction (according to the present use of the term, which meant a direct pull). The Poullet forceps which Dr. Kelly had previously exhibited was not, as stated by Dr. Longaker, a modified Chassaigny, but combined the idea developed by Hubert, of Louvain, and Chassaigny. The former had shown the necessity of pulling in the axis of the pelvis to make a traction which would be at the same time effective and non injurious to the mother, while Chassaingny had drawn special attention to the importance of grasping the child's head in such a way that the pull came as nearly as possible in the center of the figure of the child's head. The speaker had within a week used the Poullet forceps in the following interesting case: Mrs. K., had a justo-minor pelvis. She had been delivered about two years before by her present physician, a skilled accoucheur, of an average child with the forceps. This time, however, the physician had made a long unsuccessful attempt with a long Simpson forceps, when he called the speaker, declaring that the head was locked at the brim, and that it was utterly useless to try to move it with an ordinary instrument. At his request the speaker applied his Poullet-Levret forceps with the woman lying on her back. The Levret blades were simply adjusted to the head which was engaged at the brim, completely flexed. The first few tractions on the bar seemed to make slight but distinct progress. The head under the following traction efforts moved steadily, slowly, and quietly down the axis of the pelvis, rotating, and, although large, emerged at the outlet. No fixation lock or screw was used to compress the head. It took a long time to release the body, finally a male weighing 13½ pounds, measuring 60 ctm. in length, and with a head 48½x37 ctm. in its largest circumference, was extracted. The child was profoundly asphyxiated, but revived under syringing and douching. This case was but a type of many, some of which he had announced to the society, in which the Poullet-Levret forceps had done him such excellent service. He now used no other instrument.

ABSCESS OF THE OVARY, WITH PYOSALPINX.

Dr. J. M. Baldy related the following history: A woman, thirty-one years old, married thirteen years, five children, one miscarriage, always healthy, and menses regular before marriage. Had a good "getting-up" from all her labors, excepting the last, which had occurred seven years ago. She gave a history of some inflammatory trouble at that time, which had kept her in bed for some weeks. She had since bled irregularly and profusely. She had a constant pain in her abdomen whenever receiving a slight jar, or when long on her feet, as well as during coition. Her general health had been poor, and she had lossed considerable flesh. The speaker was called to attend her on the 31st of March, and found her on her back, suffering with general abdominal pain, constipation, tender, swollen, and tympanitic abdomen. She had been sick for a month,

and had been getting gradually worse. An examination *per vaginam* showed the uterus in good position, normal in size, with a mass running from the right corner of the pelvic wall; the mass was larger than the fundus uteri, and firmly bound down; painful on pressure. The pulse was 120°, and the temperature high. As she did not improve under general treatment, abdominal section was performed April 4th. The left tube and ovary were found healthy; the right tube and ovary were removed. The ovary contained an ounce or more of pus, and the tube was distended with pus. Adhesions were general. The mass was adherent absolutely everything within reach, and as was seen by the specimen, there was hardly a spot on it free from these strong adhesions. Monsel's was used to check bleeding from points of adhesion to intestines, and a glass drainage-tube was put in. After the third day there was a free discharge of pus from the tube, and the abdominal cavity was thoroughly washed out four times a day with boiled water. The pulse fell below 100, and the temperature was lowered, and neither exceeded this point subsequently. The tube was removed by the fourteenth day, and the patient made a good recovery, not only from the operation, but from all old troubles. Her pulse and temperature were normal,her pains have disappeared entirely, her peritonitis was cured, her menses had appeared at the proper time and in proper quantity, and she was rapidly gaining her lost flesh. The result had been altogether most gratifying. The case was of particular interest inasmuch as it illustrated very well the class of inflammatory tubal troubles arising from the puerperal state to which the speaker had called the attention of the society the month before. The origin was clearly septic, and not traumatic. These women got along apparently well for a few days after delivery, and then suddenly begin to develop alarming symptoms. The fact of the delay in the development of trouble was a clear proof that it was non-traumatic and threw all the evidence in favor of the septic origin, and then the micro-organisms of puerperal septicæmia had been found in these cases. This particular case was clearly one of this character. The patient had been perfectly well until her last labor; she then developed inflammatory trouble a few days after the labor, and had been a sick woman ever since. There was so far as could be ascertained no history of gonorrhœa in her case, and he would say from his knowledge of the woman that her statements were to be absolutely believed so far as she herself knew.

A NEW LEG-HOLDER.

Dr. McBride exhibited a new *Beinhalter.*

DISCUSSION.

Dr. Kelly said that this apparatus was an excellent substitute for the heavier, more clumsy, and expensive ones commonly used. He then exhibited his own, which he considered attained the same ends even to a greater degree of perfection. It consist simply of two collars of muslin padded with hair cloth, which fitted the thighs close to the knees. Through these collars pass a broad muslin strap, also well padded, which was provided with a snap-hook at each end. The snap was caught in a ring on one collar placed under the knee, and the strap was then brought under the knee, and the strap was then brought under one arm, around the back of the neck, and down over the other shoulder, and the other end snapped in the opposite collar, also in place above the knee. The distance from knee to knee, by this course, when properly flexed on the abdomen for operation, was twenty inches or less. A simple device of rings on the inside of strap allowed of still further shortening. The speaker did not consider the cross-bar between the knees at all necessary. His *Beinhalter* could be carried in the pocket. He described that of Clover; also gave blackboard illustrations of Fritch's, Gendny's, and Sänger's. Most of those in use in Germany, while convenient in a large clinic, were too clumsy be carried about. Sänger's was by far the simplest

and most convenient for general use.

Dr. Parish agreed that a *Bienhalter* was desirable, and described one that he used that was attached below the knee.

SURGICAL DISEASES OF THE WHITE AND COLORED RACES COMPARED.—Dr. L. McLane Tiffany, of Baltimore, read a paper on the above subject before the American Surgical Association.

The paper was based on the record of 4930 cases, studied during a period of thirty-four months in a general hospital. The percentages of the affections were given in detail. The paper was simply intended as a preliminary communication, and as a result of a study of the figures obtained the following suggestions were made:

1. Surgical affections follow different courses in the white and colored races, under identical hygienic surroundings.
2. Surgical injuries and operations are better borne by negroes than by whites.
3. Surgical diseases involving the lymphatic system, especially tubercular, are more fatal and more rapidly fatal in negroes than in whites.
4. Congenital deformities are rarer in negroes than in whites.
5. The surgical differences observed in whites and negroes are due to racial peculiarities.

In the discussion:

Dr. Christopher Johnston, of Baltimore, said that his experience indicates that there are individual as well as racial peculiarities. These are most striking in proportion to the pureness of the blood. He regarded the negro as a good subject for surgical operation. He had never seen carbuncle in the negro. He does not recall a cleft palate or hare lip in the darker individuals. Epithelioma is infrequent. Fibromas are quite frequent. He had found that in the negro the skin and white tissues are more frequently the seat of certain diseases than the same tissues in the white.

Dr. T. H. Richardson, presented a detailed report of the statistics of the Charity Hospital, bearing upon this point. He had found congenital deformities rarely in the negro.

Dr. E. H. Gregory, of St. Louis, has seen keloid much more frequently in the negro than in the white, and had never seen multiple keloid in the white race. The ability of negroes to stand operation may be due to his indifference, and he does not comprehend the magnitude of the operation.

Dr. W. T. Briggs, of Nashville, said that his experience confirmed the suggestions of Dr. Tiffany. Negroes are very prone to suppuration. It is extremely difficult to prevent suppuration even under strict antiseptic precaution. Negroes bear operations better than whites, but they do not get well so rapidly. While malformations are less frequent, still they do occur. The rarity of hydrocele in the hospital records may be explained by the fact that the negroes do not usually seek advice until the tumor has become so large as to give rise to much inconvenience. Ovarian tumor is rare, although he had had one case.—*Med. News.*

NOVEL SURGICAL OPERATION.—A patient from the interior of the State was operated upon recently at the Jefferson College Hospital, in this city, by Dr. J. M. Barton, one of the surgeons of the hospital, for chronic obstruction of the bowels, which had existed for about one year. The operation was one which, it is stated, had never before been performed here, although similar ones had been performed by Professor Loretta, of Bologna. The patient having been placed under the influence of an anæsthetic, Dr. Barton opened the abdomen, and found that the calibre of the large and small intestine, at their junction, had become contracted to the size of a quill. The intestine was opened beyond the obstruction, and, by means of instruments and the finger, the contracted portion was dilated to its natural size. The wounds were then closed and dressed, and the patient is now in a convalescent condition and practically out of danger. In the cases reported by Professor Loretta, the dilatation was effected at the pyloric orifice of the stomach and was done for cancerous growths.—*Med. and Surg. Rep.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JUNE 18, 1887.

Editorial.

SUPRAPUBIC CYSTOTOMY.—During the past few years a remarkable impetus has been given to the operation of suprapubic cystotomy, and recent journalistic literature upon this subject has already become voluminous. At the recent meeting of the American Surgical Association, several papers and a general discussion were devoted to this procedure. Dr. Dennis, of New York, read an elaborate paper, in which he dealt with the historical as well as the practical aspects of the subject. The first operation by this method is supposed to have been performed by Pierre Franco in 1561, but it fell into disuse until Cheselden and Douglass about 1727 published a number of successful operations, after which it again fell into disrepute owing to the enthusiastic reception of lateral lithotomy. From its earliest history to 1851 only 260 cases of suprapubic lithotomy could be collected; since then many operations have been performed. The modern operation differs from the old one only in a few details, and these of an accessory character. The incision is made in the same manner, but it has been found that moderate distension of the rectum by a colpeurynter, filled either with air or water, has the effect of thrusting the bladder upwards and forwards, especially when that viscus is moderately distended. When the bladder is thus forced to ascend the reflection of the peritoneum is also carried upwards and a space is gained for incising the bladder where it is uncovered with peritoneum, hence avoiding the danger of injuring this membrane. In order to obtain the greatest amount of space the rectum should be first distended with a rubber bag filled with from 12 to 15 ounces of water in an adult, then the bladder should be moderately filled with 6 to 10 ounces of antiseptic solution. The incision should be in the linea alba, and should be made from above downwards carefully dividing the tissues until the prevesical fat is reached which should also be incised, rather than torn apart. The opening into the bladder is made whilst the walls of this viscus are raised with tenacula, or by means of threads passed through it, and the cavity explored or if a stone be present, extracted with lithotomy forceps. Surgeons differ as to whether the vesical walls should be sutured or not, but most authorities recommend the immediate suturing of the bladder incision with Lembert sutures. Another point of controversy is in regard to the use of a soft catheter for permanent drainage, but here again the weight of authority is in favor of introducing a rubber catheter, for permanent drainage through the urethra. It is thus seen that this operation can be readily performed, and statistics prove that sometimes the results are very brilliant. In former years the operation was reserved almost exclusively for the removal of calculi which were too large to be extracted by other methods, but some of the enthusiastic advocates of this procedure at the present time would eliminate all other operations, except that of litholapaxy. Dr. John B. Roberts several years ago wrote, "that within ten years the suprapubic operation will be the operation for all cases of stone that are not treated by Bigelow's operation," a prophecy which Dr. Dennis says is "now almost realized." Dr. Dennis continues in the same strain to say, "I would venture to remark that the time is not far distant when there will be but practically two operations for stone in the bladder, the suprapubic lithotomy, and litholapaxy." Whilst these statements are too extreme and to

most surgeons would seem to be partisan in character, it is proper that the opinions of these well informed members of the profession should receive proper consideration. Two questions at once suggest themselves to the mind of everyone engaged in studying this subject. First, what are the advantages of this operation as compared with the other methods of exploring the bladder? and, secondly what is the relative mortality of this operation as compared with one or the other forms of perineal cystotomy? In the first place calculi which are too large to be extracted through the perineum and too hard to be crushed may be safely removed by the *sectio alta* and this has been recognized as an indication for this operation from the beginning. Encysted calculi may also be more readily removed in some cases by the high operation. Dennis mentions paraplegia, contracted pelvis, perineal tumors, encysted calculi, ankylosis of the hip, hæmorrhoids, hard and large calculi and great obesity as indications for this method; also for the removal of foreign bodies, chronic cystitis and calculi in women, greatly enlarged prostate, tumors of the bladder and rupture of this viscus. Some of these indications are clear and distinct, but the applicability of the others is not so clearly seen, thus anchylosis of the hip would be very seldom a contra-indication for perineal operation, likewise obesity, contracted pelvis, or hæmorrhoids; whilst chronic cystitis would seem to be better treated by the low than by the high method. Rupture of the bladder could only be treated by the suprapubic method. In advocating this as the method for general adoption, Dennis states its special advantages are as follows:

1st. The safe removal of large hard stones, which cannot be removed in any other way.

2nd. The avoidance of perineal hæmorrhage, of urinary infiltration, of perineal fistula, of laceration of the rectum and neck of the bladder, the prevention of traumatic stricture and cystic hæmorrhage, and the avoidance of any interference with the genital apparatus.

3rd. The prevention of vesico-vaginal fistula in young women, or of permanent incontinence of urine in aged women.

4th. It is the safest operation in all forms of renal disease, and the only means of saving life in rupture of the bladder.

5th. The tendency to recurrence of stone is much less than by lithotrity.

6. Its great simplicity, its present reduced rate of mortality, its freedom from danger during its execution, and its safety for the general practitioner in comparison with the perineal operations or lithotrity.

There is here certainly a great array of advantages, but is the case as bad with the old methods as one would be led to suppose? Perineal hemorrhage is not a very common accident, and can usually be arrested without much trouble. Urinary infiltration is as likely to occur in the one case as in the other. Abdominal fistula might result as well as perineal. The rectum may be overdistended with water and actually burst. The neck of the bladder may be injured if the incision into the viscus is carried too low, and the peritoneum may be injured, especially in the hands of the "general practitioner." We fail to perceive how cystic hemorrhage is prevented by one operation more than by the other. Whilst it may be better to remove a stone which cannot be crushed, by the suprapubic method in the case of a young woman who has a small vagina, it is difficult to understand how the same holds good with one whose vagina has been dilated, and where it is certainly easier and safer to penetrate the vesico-vaginal septum, and if necessary immediately close the opening with sutures. It does not seem to us that we are yet in a position to state that this operation is the safest one for patients suffering from renal disease. The suprapubic operation does present palpable advantages, but as is the case with any other therapeutic agent, it requires to be used with judgment and not indiscriminately. The doctrine that in a short time there will be but two methods of extracting a calculus from the bladder, the *sectio alta* and litholapaxy,

tends to deprive us of other very reliable operations which have served us well in the past and will continue to do so in the future. It impoverishes rather than enriches the practical surgeon. There are many other points in regard to these asserted advantages of the suprapubic method, which we are obliged to pass over; suffice it to say that it is doubtful whether most of these so called advantages are really improvements at all. Now in regard to the mortality. Up to this time perineal operations are attended with a lower percentage of mortality than the high operation, and it does not matter much whether the median or the lateral is the method employed. Dr. Briggs, of Nashville, advocates the median perineal operation and reports 119 cases with 3 deaths, and these apparently not due to the operation. Freyer, of India, reports 143 cases of lateral lithotomy with no deaths. Zelt 106 cases with 3 deaths, whilst here in our city Dr. Caleb Winslow reports 99 cases with one death, and Dr. Alan P. Smith in April, 1882, had operated 69 times with 2 deaths. Whilst these reports are more favorable than those of Sir Henry Thompson and some others, they serve to show what results may be obtained by the perineal methods. Indeed a sufficient number of recent cases of suprapubic operations has not been collected as yet, to determine its mortality rate, but it is generally conceded to be higher that of the perineal methods. In conclusion, we think this agitation of the high operation will be fraught with good, but we do not anticipate that median and lateral cystotomy are to be relegated to the shelt in the near future.

Reviews, Books and Pamphlets.

Practitioner's Handbook of Treatment, or the Principles of Therapeutics. By J. Milner Fothergill, M.D. Pp. 660. Phildelphia: Lea Brothers & Co. Third American from the third English edition.

There are few books that we are acquainted with which treat of the medical science in as delightful a manner as the one before us. The style may be somewhat ornate and the language a trifle too fanciful for scientific use, but the author is excusable in exercising a faculty which he posesses in so high a degree. The book has been so widely read that it calls for no enumeration of the table of contents, or for any special criticism. The author first discusses certain general processes as *assimilation*, *excretion*, *fever* &c., then takes up the treatment of the diseases of the various systems, beginning with the circulatory. All through the book one finds excellent formulæ and elegant pharmaceutical combinations. The only criticism that we would make on the book as a whole, is that it is too rigidly logical. The young practitioner who starts out with firm faith in its dictates will suffer many a grievous disappointment. This fault is a good one, however, at this time when scepticism and indifference in regard to treatment are so prevalent. There has been added a chapter on "The Dietary in Acute Disease and Malassimilation" and one on "The Management of Convalescence," making this edition a little larger than the preceeding one. The book is one which every general practitioner should read, for it is full of most practical suggestions expressed in the happiest form imaginable.

The Physician's Dose and Symptom Book. By Joseph H. Wythe, Prof. of Histology and Microscopy in Cooper Medical College, San Francisco, 17th edition. Pp. 226. Philadelphia, 1887: P. Blakiston, Son & Co.

This little volume contains a great deal of information as to dosage, prescription writing, preparation and administration of medicines, poisons and their antidotes with a brief account of symptoms and their appropriate treatment. It is concise, carefully prepared and the number of editions through which it has passed attest its value.

The Vest-Pocket Anatomist. By C. Henri Leonard, A.M., M.D., Professor of the Medical and Surgical Diseases of Women &c., Detroit College of Medi-

cine. 13th revised edition. Pp. 154. Detroit: The Illustrated Medical Journal Co.

This little book which the author states is founded upon Gray's anatomy is a useful abstract for the dissecting room.

Miscellany.

Increasing Doses of Drugs.—Says Gingeot, active drugs are often toxic substances, the hurtful qualities of which are modified by suitable dosage. In considering the question of the employment of medicinal agents, it is necessary at once to note that a whole category of drugs never establish "tolerance;" they belong to the class of drugs the action of which is purely or principally chemical, such as the acids. On the other hand, the toxic dose of drugs which act by modifying the vital properties of tissues or organs, particularly of the nervous system, varies according to whether the dose is given at once or has been gradually reached. This being the case, it is easy to understand that certain drugs, if used for a length of time without any increase in the dose, finish by becoming positively inert. Medicine is of no importance, said Trousseau; medication is everything—an aphorism which he justified by quoting the fact that belladonna, useful in the treatment of epilepsy, is only so on condition of being given in properly increased doses. This rule may be extended to the therapeutics of various morbid conditions. In certain affections, such as neuralgia for example, the doses should be rapidly augmented, because the malady is of short duration, while in others the increase should be gradual so as to allow of its being maintained over a long period of time. The principle in both cases is the same. There is a group of diseases in which it would seem, at first sight, that this principle is inapplicable. Take, for instance, the case of a patient who is taking digitalis for functional derangement of the heart, dependent or not on organic lesions. In such cases not only should the dose not be increased, but the treatment must be suspended from time to time even in the absence of symptoms of intolerance. The contradiction is only apparent, however. The reason for acting thus with digitalis is because digitalis is eminently a cumulative drug, and consequently, by giving every day the same dose, in reality the dose, measured by its effects, is being daily increased.—*London Medical Journal.*

Fracture Par Contre-Coup of the Cranium.—The *Rev de Chir.*, No. 2, 1887, contains a record by M. P. Berger and Mdlle. A. Klumpke, of the Tenon Hospital, Paris, of a case of four different fractures of the skull, these injuries being complicated by effusion of blood without apparent signs of cerebral compression, by cerebral hæmorrhage at a situation, opposite to that of the fracture, and by aphasia without appreciable lesion of Broca's centre.

A long comment is given on the main clinical features of this case, and the interesting memoir concludes with the following statements. 1. Fractures at the base of the cranium may be produced independently, and at some distance from the point of application of external violence to the head. 2. These fractures are most frequently found in the orbital plates, the small wings of the sphenoid, and the cribriform plate; they may also involve the petrous portion of the temporal bone. 3. They seem to result from the mechanism that has been assigned by M. Perrin to fractures of the cranium par contre-coup. 4. Intracranial effusions of blood situated between the dura mater and the cranium, due to rupture of the middle meningeal artery at the seat of fracture, may occupy the inferior part of the middle zone of the cranium, and fail to be accompanied by any sign of cerebral compression, even when they attain considerable size. 5. There may occur consecutively to an injury an hæmorrhagic deposit in the midst of the cerebral substance, produced by contre-coup at a point opposite to that of the impact of violence, without it being possible to account for this by displacement of cerebro-spinal fluid. 6. In recent

and considerable cerebral injury there may be perfectly characterized aphasia without any appreciable lesion of Broca's convolution, of the foot of this convolution or of the convolutions of the insula. 7. One cannot then, in case of recent injury to the cranium, be guided exclusively, or even mainly, by this symptom, in affirming the necessity for trephining, and in determining the seat of this operation.—*The London Medical Record.*

Carbolate of Mercury in Syphilis.—Dr. Karl Shadek, of Kieff, being anxious to try the effects of carbolate of mercury, which has been strongly recommended in syphilis by Professor Gamberini, requested M. H. Brandt, a pharmacist in Kieff, to prepare some for clinical use. This he did by precipitating a very dilute solution of bichloride of mercury with a concentrated alcoholic solution of carbolate of potassium. A yellowish precipitate was obtained, which after being frequently agitated with the liquid for twenty-four hours, assumed a whitish appearance. It was filtered and washed with distilled water till the washings showed no traces of chloride. It was then transferred to a fresh filter paper and dried under a belly jar. In this way a nearly white tasteless amorphous substance was obtained, which was scarcely acted upon or dissolved by cold, but was readily soluble in boiling, hydrochloric acid. The name given to it by Dr. Shadek is "hydrargyrum carbolicum oxydatum," and he has been using it in his private practice for several months. At first he gave it in form of pills, one of which, containing about an eighth of a grain, was ordered three, or occasionally four times a day. It was well borne, and did not interfere with the digestion. In some cases the treatment was continued for six or eight weeks, without producing colic or other disagreeable symptoms. The total number of syphilitic cases in which it was given internally was thirty-five (twenty-six men, six women and three young children). In five of these there was swelling of the gums and salivation. Mercury was found in the urine after the third dose. Its therapeutic value was especially remarkable in macular and tubercular syphilides and in syphilitic psoriasis of the palm and the sole. Syphilitic rash and slight relapsing forms yielded to the treatment in from two to four weeks; in syphilitic affections of the mucous membrane, and in papular and pustular eruptions, from four to six weeks were required. Multiple enlargements of glands were but little affected by it. In the case of children from 2 to 4 years old, doses of about the fifteenth of a grain were well borne twice daily.—*Lancet*, May 7, 1887.

Arsenic in Cystic Goitre:—Dr. Herbert Snow, M. D., writes to the *British Medical Journal*: Has arsenic any specific effect upon the thyroid gland? The following case would seem to indicate such; and, failing further experiences, I publish it for what it is worth, hoping that some one else will give the drug a trial.

Some two years ago, a woman appeared among my out-patients with an enormous goitre, of which the incision (so far as I could ascertain) had been proposed at another London hospital. The swelling presented several fluctuating bosses, one of which (just above the sternum) had suppurated. The latter was opened, with great relief to the very distressing symptoms. After complete evacuation of the pus, a copious drain of glairy fluid tinged sometimes with blood, set in, and in the course of a few weeks the patient (who had refused to remain in hospital, and had not attended regularly) was reduced apparently to death's door from extreme anæmia—the bronchocele still remaining of conisderable size, though somewhat smaller than at first. Removal of the tube failed to arrest the downward course; various drugs, including iron and quinine, were tried without the least benefit. Eventually five-minim doses of liquor arsenici hydo-chloricus three times a day were prescribed. This acted "like a charm;" the woman rapidly regained strength, and the thyroid enlargement entirely disappeared. I have since met with two

cases in which the same results seemed to follow, but as these were very slight, and as the patients ceased to attend as soon as they got better, I cannot speak of these very positively.

The Treatment of a Cold. — Dr. Leonard W. Sedwick, M. D., writes to the *British Medical Journal*: The recent publication of an interesting article in the *Practitioner* by Dr. Whelan on the treatment of colds, tempts me to put on record the plan I have adopted with the greatest satisfaction for several years. At the very outset of the attack I give the following mixture: ℞ Liq. morphinæ acet., ♏ 30; liq. ammon. acet., ʒvj; spir. chloroform, ʒj; aq. camph. ad. ℥vj., misce. A tablespoonful at bedtime. If there be an irritable dry cough, I give in addition one drop of ipecacuanha wine in a teaspoonful of water every five or six minutes for four or five times in the day if necessary. Two days of this treatment destroys most colds, and the cure is confirmed by a grain of quinine taken dry on the tongue in the forenoon of the two or three days following.

Child-Birth After Ovariotomy.— Dr. Thomas Macaulay, writes to the *British Medical Journal*: Sir Spencer Wells, in his work on *Abdominal Tumors*, has referred to many of his patients who have borne children after ovariotomy—some twins and one triplet; but I doubt if he or any other surgeon has a record of any patient who, after removal of one ovary, has borne *seven* children. I therefore think it of some interest to make known that I have just attended with her seventh child—five girls and two boys—a woman upon whom Sir Spencer Wells performed ovariotomy in the Samaritan Hospital on October 6th, 1875, who had borne five children before the operation. I had tapped this patient in June, 1874. She became pregnant after the tapping, and was confined in July, 1875, with a fine, full-formed child, ovarian tumor being then almost as large as the gravid uterus, though it did not interfere with the natural course of the labor. It increased rapidly after the birth of the child. I was present at the operation on October 6th, 1875, and attended her in another cofinement on October 5th, 1876—one day short of the year.

Phenyl-hydracine as a Test for Sugar in the Urine.—Two piches of hydrochlorate of phenyl-hydracine and four pinches of acetate of soda, are placed in a test-tube, which is afterwards half filled with water and slightly heated. An equal volume of the urine to be tested is then added to the contents of the tube, and the whole placed in a *bain-marie* for twenty minutes, after which it is cooled in cold water. If there be a considerable quantity of sugar in the urine a yellow crystalline precipitate is thrown down; if the liquid is only slightly turbid the precipitate should be allowed to stand for a few hours, and the crystals should then be examined with the microscope. Von Jakch has found his test useful in three cases of poisoning by carbonic oxide. — *British Medical Jour.*

The Queen's Physicians. — Sir William Gull, being the senior Physician Extraordinary to the Queen, succeeds the late lamented Dr. Wilson Fox as one of the physicians in ordinary. Dr. Reid, who has been for some years her Majesty's resident medical attendant, has been appointed one of the physicians extraordinary. A contemporary society journal states that Sir William Jenner only attends the Queen when "Her Majesty is really unwell." As a matter of fact, Sir William sleeps at the Castle almost every Saturday night when the court is at Windsor.—*Medical News.*

Dysmenorrhœa.—For the relief of the violent pains that in some women precede the menstrual flow, Dr. Meniere, of Paris, gives a warm water enema, containing thirty grains of chloral and thirty grains of bromide of potassium. For young women only half of the above quantities should be prescribed.—*Pittsburgh Med. Review.*

Medical Items.

Dr. R. E. Jones, a well-known physician of Woodberry, Md., died on June 11th, at the age of 66 years.

The Atlanta University for colored people has established a training school for nurses which is said to be doing a good work.

The American Medical Association will meet next year in Cincinnati on the second Tuesday in May.

Dr. John Fulton, for seventeen years the editor and proprietor of *The Canada Lancet*, died on May 15th, at his residence in Toronto, at the age of 50 years.

The Committee appointed to secure a proper memorial of the late Professor Schroeder have decided to place his marble bust in the Frauen Klinik.

The profession of medicine is so overcrowded in Germany, that the general union of physicians has sent a circular to all the directors of gymnasia urging them to dissuade their pupils from a career in which the chances of success are now so limited.

Dr. E. M. Reed, of Baltimore, was the only member of the profession from this city who drew a prize at the late annual distribution of offices from the American Medical Association. Dr. Reed was honored with the chairmanship of the Section on Medical Jurisprudence.

The New Orleans Polyclinic has been thoroughly reorganized and will open its first course in April, 1888. This seems to be the fate of Polyclinics in all of the smaller cities. They require to be reorganized about once a year.

Dr. A. L. Loomis says heart murmurs have come to be of very little pathological significance to him, unless there are other changes associated with them. The worst cases of heart disease he has met with have had the simplest and least distinct heart murmurs.

The Association of American Medical Editors, which met last week in Chicago, elected Dr. William Porter, of St. Louis, President for the ensuing year. Dr. Porter is a genial and efficient member of the editorial staff of the *Weekly Medical Review*. We predict success for the Association under Dr. Porter's administration.

Our readers residing in West Virgina are again reminded that the West Virginia State Medical Society will hold its twentieth annual session at White Sulphur Springs, W. Va., July 13, 14, and 15, 1887. The Secretary is J. L. Fullerton, M.D., of Charleston, W. Va.

Fifteen hundred delegates attended the meeting of the American Medical Association held in Chicago last week. The occasion is said to have been socially a great success. Much enthusiasm prevailed.

Our esteemed contemporary, *The Medical Record* deprecates the excessive use of medical slang. The microscopist who speaks of his slides as "toboggans" is as disrespectful of the dignified terminology of pure science as the student who dabs his professor of bacteriology as a "bug-man" or speaks of himself as a member of the "bug-class." The "throat-man," the "eye-man," the "nose-man," the "skinman" are quite expressive epithets, but what gynæcologist will pardon the liberty which imposes on him the designation of the "woman's man?" The patient who has "climbed the golden stairs" has certainly reached a more enviable state than the one who has simply "pegged out" as the *interne* would have it. That Professor "Saw-bone's" lecture on "Syph," is quite as taking as the "specif" itself will hardly be accepted as "filling the bill." We quite agree with the authority quoted that medical slang should neither be excessively multiplied nor indelicately used.

The following officers were elected at Chicago to serve for the ensuing year: President, A. Y. P. Garnett, of Washington; First Vice-President, Duncan Eve, Nashville, Tenn.; Second Vice-President, Darwin Calvin, Clyde, N. Y.; Third Vice-President, Charles J. O'Hagan, North Carolina; Fourth Vice-President, A. Stedman, Colorado; Librarian, C. H. A. Kleinschmidt, Washington; Treasurer, R. J. Dunglison, Philadelphia; Permanent Secretary, W. B. Atkinson, Philadelphia; Assistant Secretary, Joseph Ransohoff, Cincinnati; Trustees of the Journal, Leartus Connor, Detroit; E. O. Shakespeare, Philadelphia; W. T. Briggs, Tennessee; Judicial Council, J. H. Murphy, St. Paul; J. M. Toner, Washington; J. K. Bartlett, Milwaukee; A. B. Sloane, Missouri; X. C. Scott, Cleveland; A. W. McLuer, Iowa; D. W. Stormont, Kansas; J. H. Hibberd; Indiana; Committee on Necrology, J. M. Toner, Chairman; Committee on State Medicine, R. G. Jennings, Little Rock, Chairman.

The following Chairmen were elected by the Sections: Surgery, Donald McLean, Ann Arbor, Chairman; B. A. Watson, Jersey City, N. J., Secretary; Medicine, A. B. Palmer, Ann Arbor, Chairman; N. S. Davis, Jr., Chicago, Secretary; State Medicine, H. B. Baker, Lansing, Mich., Chairman; S. T. Armstrong, Tennessee, Secretary; Children, F. E. Waxham, Chicago, Chairman; W. B. Lawrence, Batesville, Ark., Secretary; Dental and Oral Surgery, J. Tafft, Cincinnati, Chairman; E. S. Talbot, Chicago, Sect'y; Ophthalmology and Otology, F. E. Hotz, Chicago, Chairman; H. H. Jackson, Philadelphia, Secretary; Dermatology and Syphilography, L. Duncan Bulkley, New York, Chairman; T. Fayette Dunlap, Secretary; Medical Jurisprudence, E. M. Reed, Baltimore, Chairman; Dr. Belt, Boston, Secretary.

Original Articles.

THE TEN INCH OPTOMETER. A VALUABLE INSTRUMENT TO THE PHYSICIAN.*

BY J. J. CHISOLM, M.D.,

Chairman of the Section on Ophthalmology.

The purport of the paper was to show that by means of a ten inch focal lens, attached to a two foot rule, or rather $\frac{2}{3}$ of a yard stick reduced in thickness for convenient handling with all the inch marks retained, an instrument was prepared by which not only could a physician say with positiveness that a patient consulting him concerning deficient eye sight could or could not be benefitted by spectacles, but at the same time could make a diagnosis as to the variety of an error of refraction, and the degree. Upon this two foot rule slides a ferrule sustaining a frame work which holds a card upon which is printed matter in large, medium and fine type. Such an instrument Dr. Chisolm found in use at the Royal Ophthalmic Hospital London many years ago, before ophthalmoscopic investigations had attained their present development. This simple instrument seemed to give valuable information in the adjustment of spectacles. He has not discarded it for other improvements, but continues to find it a means of rapidly, easily and correctly determining many points in refractive work. In the adjustment of spectacles in dispensary work, where economy of time is an object, he can by this measure find the proper glass, for old, flat, or long eyes, while by the trial case the first lens of a series is being tested.

The instrument illustrates a few of the fundamental laws of optics. The first *law of optic is* that a well grounded lens will focus distant, considered parallel rays of light, at a fixed point. A ten inch lens always at ten inches. The reverse of this law necessarily must be that if a bright point of light be placed at ten inches before a ten inch lens, the light from this source of illumination, passing through the lens, must go away as parallel rays, or as if they had come from a great distance. Should a well shaped, well seeing eye, be placed behind the ten inch lens to catch these outgoing parallel rays, and refocus them through the crystaline lens upon the retina, this eye would be doing the same work as if it had taken the very distant parallel rays, without a preparation by a lens, and focused the same. Therefore when an eye can see clearly fine print through a ten inch lens at the distance of ten inches the eye must possess good distant vision. The ten inch point of this ten inch optometer therefore becomes a standard for good distant sight. Any one who can read clearly and easily fine print at this point through the optometer needs no kinds of lens to help him to see distant objects.

The second law of optics is, that if the lens be fixed the focal point of condensed light will vary in distance from the face of the lens as the source of illumination approaches; and if it be desirable to exhibit the brilliant condensed point of light on a screen placed behind the lens this screen will have to be moved backward as the source of illumination approaches. These varying points for condensation are called the conjugate foci of the lens. In connection with this law comes another, viz.: that if the lens be fixed, and also the screen, then the only way by which the focus of light can be continuously shown on the screen from advancing rays of light is by continuously increasing the strength of the lense for each advance of the light source.

The human eye is made in accordance with this last law. The eye ball has stout resisting walls against the interior of which the retina is firmly fixed so that the sensitive nerve screen for the reception of visual images shall always be in place. The crystaline lens is equally fixed in its position behind the iris, so that it cannot move away from its binding ligaments. Yet we know that we can see distinctly far as well as near objects, objects producing constantly varying foci from their varied

*Abstract of a paper read before the Medical and Chirurgical Faculty of Maryland at their late annual meeting.

positions which necessitates a change in the form of the lens for each advance of the object. The muscles within the eye ball and the well known elastic properties of the crystaline lens allow these lens changes. This function is called that of accommodation. Useful near vision is represented in the reading of fine print placed at one foot from the face. The reading of fine print, and the seeing of very distant objects and of course all visible intervening objects, is called the range of one's accommodations, and it ought to be possessed by every good eye. When the fine printed matter on the ten inch optometer card is still clearly seen by the eye placed behind the lens, and when it is made to advance from ten inches forward to nine, eight, seven, six and to five of the optometer stick, it means that the lens within the eye is continuously changing its shape with corresponding increase of focal power for each advance of the card. When the five inch point is reached the crystaline lens is doing the same degree of work as when the eye reads fine print at one foot from the face, as in book reading or any other near work. Hence the five inch point of the ten inch optometer becomes the standard for good easy near work. Anyone therefore who can read the fine print on the card at ten inches of the optometer and at all intervening points up to five inches, possesses all the accommodation needful by good eyes for seeing at all distances; such persons have no need for spectacles.

Any deviations from these two fixed points indicate an effort at seeing and also indicate that glasses are required. Should the vision exceed the 10 point of the optometer and extend to 12, 14, 16, 18 or 20 inches for the finely printed matter, it is an evidence that the crystaline lens is relaxing as the card recedes, and the extent of the withdrawal shows the amount of muscular or accommodative work needed by the lens for the ten inch optometer reading. In a good eye the lens is passive for ten inches optometer reading which we have seen is the equivalent for seeing clearly distant objects; then it retains all of its accommodation or muscular power for near work. If much of this accommodation is used up, when the eye is supposed to be at rest, in distant seeing, there is but little left when near work has to be done; and such eyes soon become tired. The difference between the 10 inch point, the standard for perfect distant sight, and the receding point for clear vision of the card, say to 15 inches will give the magnifying glass, the equivalent to the effort being made by the eye. It is the one needful for all use, to do away with over exertion of the eye. If these figures be reduced to fractions the calculation is soon made $\frac{1}{10}-\frac{1}{15}=\frac{15}{150}-\frac{10}{150}=\frac{5}{150}$ reduced to $\frac{1}{30}$. A 30 inch convex spectacle is the one required. Should the eye read clearly as far out as 20 inches of the optometer the difference between $\frac{1}{10}-\frac{1}{20}=\frac{20}{200}-\frac{10}{200}=\frac{10}{200}$ reduced to $\frac{1}{20}$ shows that a 20 inch convex lens is needful for distant vision. For any intervening point the same calculation is to be made.

All overseeing eyes are flat by nature in the antero-posterior diameter and are called *hyperopic*. They are variations or deviations from the round eye which is the normal type, and require magnifying glasses to make eye work easy. If we accept the five inch point of the optometer for comfortable near work, reading, writing or sewing, should any eye, whether the flat eye of the hyperopic or the flattening lens of those advancing in years, called *presbyopic*, not be able to read clearly the fine print of card as far in as five inches, but can only make it out clearly at 6, 7, 8, 9 or even 10 inches, such person have lost the ability to do near work and must use magnifying spectacles if they desire to regain the privilege of reading fine print. The five inch point of the optometer, the equivalent for near work, must be kept, and the sight brought back to it from the 10, 9, 8, 7 or 6 by the addition of a convex glass. The difference between these figures reduced to fractions denotes the strength of the spectacle. $\frac{1}{6}$ is what the patient can do, $\frac{1}{5}$ is what he ought to do, $\frac{1}{5}-\frac{1}{6}=\frac{6}{30}-\frac{5}{30}=\frac{1}{30}$ or a No. 30 inch convex spectacle. $\frac{1}{5}-\frac{1}{7}=\frac{7}{35}-\frac{5}{35}=\frac{2}{35}$ or $\frac{1}{17\frac{1}{2}}$ discarding the fraction, number 17 inch convex specta-

cle is the one required. $\frac{1}{5}—\frac{1}{8}=\frac{8}{40}—\frac{5}{40}=\frac{3}{40}=$ or $\frac{1}{13}\frac{1}{3}$; 13 inch convex spectacle is the reading glass wanted. By this method it is very easy for the family physician to find out what kind of spectacle any of his older patients require.

In a similar manner calculations can be made for near sighted, *myopic* eyes. The ten inch of the optometer is the point equivalent to good distant vision, and is the point to be sustained. If instead of reading the fine type of the card clearly at ten inches the individual only reads it at 8, 7, 6 or 5 inches, the difference between $\frac{1}{10}$ the point at which he ought to read, and the $\frac{1}{5}$ the most distant point on the optometer at which he can read clearly the type, gives the necessary near sighted glass. $\frac{1}{5}—\frac{1}{10}=\frac{10}{50}$ $\frac{5}{50}=\frac{5}{50}$ or $\frac{1}{10}$. A 10 inch concave lens will restore vision to the 10 point of the optometer and will therefore enable him to see distant objects clearly. If the person be so very near sighted as to read only at the 3 inch point of the optometer, with no range of accommodation for nearer or further points, such a person must hold the book too near to the face for comfortable reading and will require different glasses for both far and near work. For reading or writing the glass needed will be the difference between $\frac{1}{3}$ the point at which they read and $\frac{1}{5}$ the point at which they ought to read $\frac{1}{3}—\frac{1}{5}=\frac{5}{15}—\frac{3}{15}=\frac{2}{15}$ or $\frac{1}{7\frac{1}{2}}$, which gives No. 7 inch concave spectacle for reading. This glass will not, however, give also good distant vision. The ten inch point is always the basis for distant calculations. $\frac{1}{10}$ what the eye should do to see distant objects $\frac{1}{3}$ what the eye can only do, $\frac{1}{3}—\frac{1}{10}=\frac{10}{30}—\frac{3}{30}=\frac{7}{30}$ or $\frac{1}{4}\frac{2}{7}$ a No. 4 concave glass is the one needful for seeing at a distance.

As the varying positions on the stick of this ten inch optometer represents all the glasses used for improving eye sight, persons who can be benefitted by spectacles must be able to read clearly the fine type at some point of the instrument. Should only the coarse heading of the optometer card be made out and none of the fine text, then no glass can can be found to restore the reading power to the person. Such a case is one of *amblyopia*, and ophthalmoscopic investigations must be made to determine the cause of lost vision.

With a little study, this simple instrument can be made a very valuable one to the physician who has no oculist friend at his elbow for consultation, and yet is expected by his patients to determine for them many points of optics, and also many serious questions in ophthalmic practic.

A patient advancing in years who heretofore has had good sight, has lost the ability to read. It is very desirable for his future good to know the cause. This optometer will show promptly whether it be an error of accommodation, and whether a change of spectacles is all that is necessary. Should no point of the optometer be clear it then becomes a question not of glasses, but of much more serious import. It may be glaucoma, cataract, retinal changes, hemorrhage in the choroid, or some intra ocular disease that requires more than ordinary professional care, and clearly a case for prompt special treatment. The family physician protects his reputation, and saves the eye sight of his confiding patient by acting accordingly.

A Suggested Alteration in the Compound Licuorice Powder.—Having found that the above preparation produced very severe griping in many instances where he had ordered it, the griping being particularly severe in some of his younger patients, Dr. Martin Oxley (*Lancet*) had ordered the following formula for some time past, in which anise fruit is substituted instead of the fennel, and one fourth part of ginger is added The altered formula runs thus:—senna and liquorice-root of each 2 parts; anise fruit and sulphur, of each 1 part; sugar, $5\frac{3}{4}$ parts; ginger, $\frac{1}{4}$ part. This altered preparation is quite as satisfactory in its laxative properties, is less liable to gripe, and is as pleasant to take as the officinal powder, and he would suggest its trial in cases where the powder as now prepared produces the disagreeable effects to which he has referred.—*Med. and Surgical Reporter.*

Society Reports.

THE CLINICAL SOCIETY OF MARYLAND.

STATED MEETING, HELD MAY 5, 1887.

Dr. Wm. Pawson Chunn read a paper

ON THE TREATMENT OF RETAINED PLACENTA WITH COMPARISON OF CASES.*

DISCUSSION.

Dr. L. E. Neale said, inasmuch as Dr. Chunn had asked and answered the question, "why was the dilator used and what were its advantages?" perhaps he would also explain, why, in the same case of retained placenta, ergot was used before the dilator and what were its advantages.

Dr. Chunn replied that the use of ergot in certain cases undoubtedly did good, and when the placenta is not adherent it will very often cause it to be expelled. He does not think a little ergot is harmful, though he does not believe in its indiscriminate use.

A TUMOR FROM THE NASO-PHARYNX.

Dr. W. B. Platt next exhibited a specimen of a tumor and also the patient from whom it was taken.

The tumor was removed from the naso-pharynx. It began to manifest itself about two years previously. There was much pain on swallowing. Nose was stopped, principally on the left side. Palate pushed downward and the uvula was toward the right side. Hemorrhage took place once during the progress of the growth. Patient was sent to Bayview Hospital and the operation was performed. A longitudinal incision was made through the palate and the galvano-cautery wire was tried in order to secure the tumor, but it failed. Then the cold steel wire was used, the tumor secured and removed with very little hemorrhage. The wound was stitched together and remained so for nine days. Patient recovered well and her speech was very much improved. He thought first of making a transverse incision, but the longitudinal one has the advantage of giving more room to work. The tumor was irregular in shape and quite firm. The question is, Should he not have done a more radical operation? Hemorrhage is sometimes great in these cases. Dr. Sands, of New York, once removed a tumor with forceps and there was great hemorrhage from it.

Dr. Hiram Woods read a paper entitled

REVIEW OF RECENT LITERATURE ON CHLOROFORM AND ETHER.*

DISCUSSION.

Dr. G. J. Preston said he felt very much interested in the paper of Dr. Woods. He remembered a discussion in this Society a few years ago, when chloroform was decided to be the better agent. The physiological action of the two drugs is an important factor. With chloroform the effects are sudden. With ether we can see the danger coming. The fact that oculists have been so successful with chloroform is due to the stimulating effects which chloroform first produces and that the operations are short. He thinks that the cases should be selected for the anæsthetic. Where there is bronchitis and other affections of the air-passages chloroform should be given. For prolonged operations without these complications, ether is best.

Dr. J. G. Wiltshire said he was very much pleased to hear the paper. Chloroform depresses the heart, and stimulants are indicated. If chloroform inhibits the action of the pneumogastric nerve, does not atropia stimulate the excitor motors?

Dr. Robert Johnson said such discussions should come up every year, because administrators of anæsthetics become so taken up with the one that they use, that they becomes careless as re-

*See MARYLAND MEDICAL JOURNAL May 21st, 1887.

*See MARYLAND MEDICAL JOURNAL, May 14, and 21, 1887.

gards their danger. He called attention to two cases. One was a case of hare-lip. He gave chloroform and the child died on the fourth day with capillary bronchitis. The other case was a man with Bright's disease, to whom he gave ether and he made a good recovery. Atropia stimulates the respiratory centers, amyl nitrate is also a good stimulant.

Dr. J. T. Smith said the subject under discussion is an old one, but it is constantly recurring. The tide fluctuates in both directions; when men of great experience give such diverse opinions, both agents must be good. Ether is now more used than formerly, so more deaths have been reported. The safety of anæsthetics in ophthalmic practice is due to the fact that the operator is at the face of the patient and can observe more clearly any changes that might take place. He was glad that the subject was brought forward for discussion.

Dr. W. B. Platt said ether had won its way into England where at one time prejudice was greatly against it. Chloroform is used more in Germany. Morphia was advocated by Prof. Tieste, of Leipsic. It was thought by its use less anæsthesia would be required. There will always be some cranks against the use of one or the other of the anæsthetics, just as similar individuals oppose vaccination, for example. He thinks that we will soon settle down to the use of ether again.

Dr. G. H. Rohé said that he had had a good deal of experience with ether and never had failed to anæsthetize his patient. He had one patient to die on the third day after operation for vesico-vaginal fistula from pneumonia. What the cause of the pneumonia was he could not say. He now always has the patient well protected by covering during ether administration. He never believed in Dr. Emmet's statement about the danger of ether in Bright's disease. He believes it is not good to give it in bronchitis. Ether increases the bronchial secretions and the accumulations may be so great in the lungs as not to be thrown off. He believes that Dr. Sayer's method of giving saturated chloroform vapor is a dangerous one. Death usually takes place upon the addition of more chloroform. Both ether and chloroform depress the heart, as sphygmographic tracings have shown. He has not given alcohol for ten years, but uses morphia and atropia before the anæsthetic. It reduces the reflex irritability of the larynx to the ether vapor.

Dr. W. P. Chunn said he had given both anæsthetics and never saw a life lost. Five or six years ago chloroform was in more common use than ether. Chloroform is more powerful in its effects and likewise more rapid, consequently more dangerous. Even if the chloroform is stopped before the muscles are relaxed anæsthesia will increase for a time. Chloroform in certain cases is fairly safe. A great deal depends on how it is given. In regard to ether he had never seen an accident.

Dr. W. H. Norris thought that a great deal of the trouble which comes on from anæsthetics is due to the quality of the drug. He had given chloroform many times and he had only seen one case where it acted badly. Chloroform was used during the late war by all army surgeons and they agreed that it was the best anæsthetic. He had had little experience with the use of ether. He related a case of puerperal convulsions where he gave four ounces without effect. He asked the opinion of the members as to the use of the combination of chloroform and ether.

Dr. W. Winsey said as to which is the safer of the two drugs, those who use them will be guided by the effects of either. He prefers ether. A patient under the influence of an anæsthetic is never free from danger, the administration of which should only be entrusted to competent hands.

Dr. C. W. Michell said he had given both agents for the past seven years, though chloroform has been in more general use. He began its use at the Presbyterian Eye and Ear Hospital. He finds now that ether is more generally given than chloroform. Anæsthetics should be given as other drugs are; ether is not comparatively safer nor comparatively dangerous. Care should be practiced in the selection of cases. He had

seen two deaths from the effects of each drug. The fact of concentration should be considered in ether as well as in chloroform. The bronchial secretions increased by the influence of ether, should be allowed to escape by turning the head to one side and pulling the lips apart by placing the fingers in the patient's mouth. The snoring of ether is the result of the accumulation of mucus in the pharynx. Of the two deaths from chloroform, in the first the drug was given by an inhaling apparatus and only ⅔ of one teaspoonful was used; in the second case a towel was used for the administration and the chloroform was only poured on once; both patients died suddenly. The first case of death from ether the patient died on the ninth day from pneumonia. He thinks that chloroform would have been better. The second case was a patient with cavities in both lungs, upon whom laparotomy was performed. The fifth day afterwards acute pulmonary trouble came on, producing severe pulmonary hemorrhage and finally death. Kidney trouble renders both drugs dangerous.

Dr. L. E. Neale was glad to observe the practical turn which Dr. Mitchell had given to the discussion in trying to select special anæsthetics for special cases and special conditions. Just here he thought it interesting and important to note that chloroform had thus far held the lead as an anæsthetic during parturition, and out of many hundred thousands times it been has given not a single well authenticated case of death is on record. This was possibly explained by the physiological hypertrophy of the heart preventing cerebral anæmia.

Dr. L. McLane Tiffany said the question is not between chloroform and ether, but when we have to produce anæsthesia, how can be best bring it about? It is wrong to think we have only two drugs to select from. The recognition of the disease, the choice of the remedy and its application are the essential points to be considered. There is no such thing as best anæsthetic. Then it comes to the indications; contraindications to the use of ether rest largely in the lungs. It has occurred to him to change the anæsthetic even while operating. Chloroform is better in such conditions. He related a case where he removed a tumor from a patient's neck. He began anæsthesia with ether, the secretions from the bronchial tubes began to pour out so fast that the ether was discontinued and chloroform used instead. The patient did well after the change. In the aged, say 70 years, he always gives chloroform, and also in the young. In all other cases, other things being equal, he gives ether. He then related a case where the patient had both bronchitis and heart trouble. He gave chloroform and the patient did well. He always precedes the anæsthetic with morphia and atropia.

Dr. J. E. Michael said it is fortunate that this subject does recur for discussion. The tide is very apt to turn with experience. He is not given to ether alone nor to chloroform, for experience shows that both are dangerous and must be carefully watched. In both cases of death from chloroform reported by Dr. Mitchell there was found disease of the kidneys. If other thing are equal in a patient with kidney disease he does not know which he would choose of the two anæsthetics; where there is much bronchial secretion ether is contra-indicated. Chloroform is best in tracheotomy. Select the anæsthetic according to the indications. The death from ether in the case related by Dr. Mitchell was caused by hemorrhage which it excited. These discussions will compel us to look at the matter from a clinical standpoint. Tendency seems decidedly towards reviewing the ground and to determine which is the better agent to use under certain circumstances.

Dr. R. Winslow said that he was struck while abroad at the faulty methods employed in Billroth's clinic in administering the A. C. E. Mixture. It was frequently given in the upright position. One patient died from this method of administration.

Dr. Hiram Woods, in conclusion, said: What has been said by the gentlemen who have spoken recalled a remark he heard Dr. Tiffany make in this Society about four years ago, when this same

subject was under discussion. He said "No matter what anæsthetic you give you put patient in a position greatly resembling death, and it always needs care to avoiding stepping over the line." The mainstay in the use of any anæsthetic is the recognition of danger. Drs. Preston and Smith have alluded to the palor of the face as being more apt to be noticed when the operation is about that part of the body, and this, to an extent, explains why the oculist does not have many accidents. Another reason is that it is impossible for the operator to be at work on the eye while the anæsthectic is being given. Dr Chisolm was the first he heard give this reason. When the operation begins, giving of the anæsthetic stops. If the patient awakens the anæsthetic has to be renewed, the operator stops and as he wants to get back to his work as soon as possible there is not much danger of the patient getting an overdose. Dr. Smith has also alluded to operations about the peritoneum as being specially dangerous. In the remarks made by Dr. Weir at the New York Academy deaths during operations on the peritoneum are excluded by the speaker from deaths due to anæsthetics, because, I suppose, any injury to the peritoneum is so apt to be followed by shock. He thought Dr. Wiltshire must have misunderstood him or he must have used the wrong work. Vulpian's experiments showed that anæsthetics increase not decrease the inhibition of the vagus, hence atropia antagonized them. As the doctor says, part of the good effects of atropia undoubtedly comes from the direct stimulation of the cardiac ganglia. Dr. Johnson's case of capillary bronchitis following the use of chloroform in an operation for hare-lip and cleft-palate is open to the objection that the operation involved the respiratory track. Dr. Gerster thinks that all such operations should be excluded when we are speaking of the effects of anæsthetic agents on the lungs. The reason for the occurrence of lung troubles after operations was thought by Dr. Weir to be due to free use of antiseptics in surgical practice and the prolonged exposure of the patient. Dr. Platt says the use of morphia is not as common abroad as it formerly was. It has been found that large doses depress the heart and add to the danger. This is just what one would expect from large doses. The larger the dose the more transient is the stage of stimulation and more profound the stage of depression. The dose should be small, not over $\frac{1}{6}$ gr. to $\frac{1}{4}$ gr. at most. Drs. Mitchell and Rohé each report fatal cases of pneumonia after the use of ether. Dr. Mitchell says the pneumonia is always catarrhal. One of the cases reported by Dr. Gerster was lobar pneumonia in the stage of engorgement. Neither of these gentlemen think ether is contraindicated in nephritis. He knows nothing of ether experimentally, but a reference to Dr. Gerster's paper in the *Medical Record* will show that many cases have occurred which shows that ether is very dangerous in Bright's disease. He could not see how Dr. Rohé can find in Dr. Sayre's remarks teaching which advises the administration of *a saturated* chloroform atmosphere. Dr. Sayre gives a summary of the principles he advanced in 1876, which are substantially the same as those which he holds now. He is not acquainted with the article which Dr. Rohé says was published by Dr. Sayre some years ago in which he recommends the administration of a saturated vapor. His present paper and the extract he gives from his teachings in 1876 are directly against such practice. He agreed with Drs. Rohé and Chunn that many of the chloroform accidents occur just after more chloroform is poured on the towel. He believed this so because the anæsthetizer often puts the towel with the fresh chloroform just where he had it before. Dr. Sayre's method of using an inhaler prevents this accident from occurring. As regards Dr. Pancoast's case he did not wish to acquit chloroform of its share of the work. All that he claimed was that it is clearly shown that Dr. Pancoast gives chloroform for slight operation's in a manner which many recognized authorities consider wrong. If the interview from the dialy papers which

he quoted is correct, the man died apparently from shock due to the performance of a slight but painful operation during partial anæsthesia. There was of course more danger under the chloroform than there would have been without any anæsthetic. There was also more danger than there would have been had the chloroform been pushed to full narcosis.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD JUNE 2ND, 1887.

The President THOMAS M. DRYSDALE, M.D., in the chair.

Dr. John C. DaCosta read a paper entitled

CLINICAL NOTES ON OVARIOTOMY FOLLOWED BY HERNIOTOMY IN FOUR DAYS. RECOVERY.

M. R. S., age 51, single. Came June 29th, 1886, to consult me in regard to an abdominal tumor, which she had first noticed in August, 1885. The patient was weak, anæmic, full of malaria, and broken down by years of hard work and waiting on sick and enfeebled relatives. She has had, according to her family physician, a history of acute dementia; she inherited a tendency to phthisis. She has now weak lungs; weak heart with intermittent pulse; chronic albuminuria; degenerated condition of the blood vessels; double hernia, femeral; and an abdominal tumor. Examination shows a round mass about the size of a head in the bottom of the abdomen, nearly central in position and tied down, apparently, by adhesions. The tumor was first noticed over ten months ago and has grown slowly but steadily since. It is very painful when touched and is, at times, subject to sudden increase of pain attended by raise of temperature. She was put under treatment for her general condition for two weeks and was then tapped and about one pint of fluid was removed. I declined to operate on her as she seemed to have no vitality to resist shock of operation. She was put under treatment for three weeks, but so little improvement took place in her general condition that she was again discharged as unfit for operation. She was sent to Baltimore and to Atlantic City and came back improved. She went to Wilmington in March and took a course of steam-baths and electricity, and returned in April much improved in general condition, but with the tumor decidedly increased in size. She soon commenced to break down again, and although I did not advise operation, I was willing to do it if her family physician and friends insisted on it. The patient decided on operation, as nothing could be worse than the condition she was in. April 20th, 1887. I operated on the patient in Jefferson College Hospital in the presence of Dr. Bush, of Wilmington, her family physician, and assisted by Prof. Parvin and Drs. Horwitz, Ashton and Graydon. I removed a 25 pound multilocular cyst of the left ovary, the right ovary was normal, adhesions were easily torn away. The tissues were friable and easily broken and the blood vessels were in a degenerated condition. The pedicle was tied and cut off and the abdomen washed out with distilled water. When just ready to sew up the wound a profuse hæmorrhage took place, so great that it was necessary to compress the aorta and enlarge the abdominal wound to find the bleeding vessel, which was a large degenerated artery, which, unable to resist the vis-a-tergo of the heart had broken short and split down about one inch below the ligatures. A second and third ligature were applied, the last one-quarter of an inch from the uterus. This stopped the bleeding and the pedicle was cut off above it with the Paquelin thermo-cautery.

The wound, eight inches long, was closed with seventeen stitches and dressed with bichloride gauze. The patient was so nearly dead that atropia and whiskey had to be used hypodermically. Vomiting continued for three days when it ceased under the use of calomel and brandy. The menses came

on. The old hernias came down several times and were replaced, but on the evening of the 23rd vomiting recurred and the hernias coming down the left could not be returned. Dr. O. H. Allis was called in consultation and we agreed to wait until morning as the patient was unfit for operation. The next afternoon the patient was apparently dying, the heart had almost given out, vomiting was constant and the left hernia was strangulated. Whiskey and morphia were used hypodermically. At 4 P. M. Dr. Allis operated for me using cocaine, without ether or chloroform. The vomiting stopped at once, and the patient took and retained three ounces of brandy and twenty-one of milk in the next twenty-four hours. The patient passed a fair night, the bowels were opened and five glasses of milk-punch were taken. The quantity of food was gradually increased. The hernial wound discharged sanious pus and a drainage tube was inserted and the wound was washed with bichloride 1 to 1000. The temperature fell from 102° to 100°. May 3rd the abdominal stitches were taken out and a perfect union was found without pus. The hernial wound improved from day to day. Two points are worthy of notice.

1st. The value of the bichloride solution. The abdominal wound was looked at in nine days and the stitches taken out in thirteen days without pus showing, and the temperature was reduced two degrees by washing out the hernial wound. 2nd. The value of cocaine in albuminuria. The patient was put on cocaine immediately after the ovariotomy, and the urine, which on the second day had fallen to 17 ounces, went up the next day to 37 ounces, and after the herniotomy to 49 ounces. 3rd. The ability to do such a grave operation with cocaine when either ether or chloroform would have killed the patient. May 18th. The patient is well. There has not been 1° variation in temperature nor 10 beats in the pulse-rate for two weeks past.

DISCUSSION.

Dr. Longaker remarked that recent observations had demonstrated the fact that ether was a dangerous anæsthetic under such circumstances as described by Dr. DaCosta, and in such cases chloroform is considered by some authorities as being much safer. Dr. Fordyce Barker considers chloroform much safer than ether during parturition or if there be heart disease.

Dr. M. Price asserted that there was no danger in ether. Accidents happen because the administration is entrusted to any one who may be present, or even by the nurse. It should in all cases be given by one who understands its effects and who will give it his entire attention. Nor should it ever be given to saturation; even a prolonged operation will require but a few ounces, and there is never occasion for the use of a pound or more as is sometimes seen. He has no fear of ether in heart disease or any other condition, even of extreme weakness; he considers the danger of the shock of operation much greater than the danger from the ether; he has used it freely at the Philadelphia Dispensary in the extraction of teeth and has never seen the slightest occasion for fear in its use.

Dr. T. M. Drysdale has employed ether from the time of its introduction and has never seen any bad effect from it even in cases of puerperal convulsions where the kidneys had been affected. If ether is properly administered a few ounces only are required to produce an anæsthetic effect.

Dr. Baldy has given ether in patients suffering from weak heart and kidney troubles and has never seen any bad effects. He does not use any antiseptic in abdominal surgery and it is a rare exception, with him, to find pus in the line of union. The diurectic effect of cocaine was announced by Dr. Chas. Penrose.

Dr. Chas. Penrose stated that experiments upon the effect of cocaine used internally, made by him under the directions of Dr. DaCosta at the Pennsylvania Hospital, were published in the *Medical News* eighteen months ago.

Dr. Parish remarked that ether is not certainly safe under any circumstances, and it is decidedly unsafe in patients suffering from diseased kidneys

or weak heart, or who are in a septicæmic condition. The greatest danger is not during the time of administration and the observation must not cease with the rally from the effects of the ether. The harm done will be noticed subsequently. He has seen much injury result from its use after labor for the purpose of curretting the uterus to remove shreds of placenta or membrane causing septicæmia. If cocaine will assist the action of the kidneys and will answer the anæsthetic needs it should be preferred to ether in all patients suffering from kidney disease or weak heart.

Dr. Longaker remarked that Dr. Emmet was the first to call attention to this undesirable after effect of ether. A man was etherized to reduce a dislocation of the shoulder. He died a few hours later from the effects of the ether; he had fatty heart and large white kidneys.

Dr. DaCosta in closing the discussion remarked that common sense was the basis of medical and surgical practice. He would not attempt an ovariotomy without ether. His patient had weak lungs and heart, an intermittent pulse and albuminuria and he gave her ether. Would Dr. Longaker give chloroform with such a heart? Ether is much safer as regards the heart. As to the kidneys the chloroform would be the best, but the risk of the ether is least. He had seen ether given to a patient who had suffered a year previously from an acute attack of nephritis, and the result was death a few days subsequently. The best man among the assistants should always be the one selected to attend to the ether. Dr. Orville Horwitz gave it in this case and Dr. DaCosta knows of no better administrator. The time of the operation was eleven minutes, and between three and four ounces of ether were used, and the woman was perfectly under its influence all the time. In the second operation, with the exception of stick of the hypodermic needle there was no pain; the solution of cocaine was applied by means of a brush to the cut surfaces as soon as incised. Dr. Baldy has been very fortunate as regards the healing of his abdominal incisions without the formation of pus. Dr. DaCosta has seen very nasty pus cases both with and without the use of antiseptics; fifty per cent of the cases in which no antiseptic was used have had pus along the incisions and suture tracks. He does not consider ovariotomy and labor similar as regards the choice of an anæsthetic; even if the kidneys are affected before or during labor they recover rapidly after the labor is over.

PYO-SALPINX.

Dr. M. Price reported an operation for pyo-salpinx. Kate L., had been married twice, had given birth to a child by her first husband. After her second marriage she had four miscarriages at about the third month of pregnancy. She had contracted both syphilis and gonorrhœa from her second husband. She had been a great sufferer for six years and for the last one and a half years had been a chronic invalid. Both ovaries and one tube were removed, the other tube being so adherent to the bowel that it could not be separated. The left ovary and tube contained pus and were strongly adherent to surrounding parts; the omentum was adherent and had to be perforated. Drainage tube used and was removed on the third day. The patient made a rapid and perfect recovery.

DISCUSSION.

Dr. Parish remarked that, based on the experience of Tait, it is not safe to leave a sound tube if one is removed on account of purulent disease, as the one that is left almost certainly becomes diseased subsequently and will require a second operation.

Dr. M. Price has no hesitation in removing the sound tube if the cause of the pyo-salpinx was gonorrhœa. The portion left in this case was so fast to the bowel that a resection of the latter would have been necessary for the removal of the tube, and it was left, not out of respect for the tube, but for the sake of the bowel. He thinks all cases of pyo-sylpinx have a gonorrhœal origin.

Dr. H. A. Kelly also agreed that it one tube requires removal for pyo-salpinx the other should not be left, because the nidus of the disease remains in the uterine mucosa and it will travel up the other tube if it is allowed to remain. The same rule applies to ovarian pain. If one ovary is the seat of severe pain, so as to require removal on that account and the other ovary be allowed to remain the pain will be transferred to it. There are exceptions to these rules. When an ovary is removed on account of cystic disease the sound ovary should be left.

Dr. Baldy agreed with the previous speakers. Tait reported twenty-six cases of unilateral operations for pyo-salpinx and in eight of these patients he has operated the second time and the balance require operation. He has a case of the same sort under his care now and it is apparently going the same way. He does not agree with Dr. M. Price in considering all cases of pyo-salpinx to be of gonorrhœal origin. Martin found 70 per cent. to be of puerperal origin. Microscopic examination of the tube contents will show the characteristic micrococci.

Dr. Hinst remarked that Martin found micro-organisms peculiar to puerperal sepsis alone in some cases, others were purely of tubercular origin and the coccus of actinomycosis was also found to be a cause of pyo-salpingitis.

Dr. Longaker spoke of Martin's researches and called attention to the fact that the prognosis of these cases is not gloomy when they are not operated upon. The inflammation may subside and a perfect cure follow, so that the patient may become pregnant. Only 20 per cent. require operation on account of the severity of their symptoms, and it should be borne in mind that operation does not always cure these cases.

Dr. M. Price has always operated in pus cases and all his cases are absolutely well; all are still under observation. In one case of abscess of ovary, upon which he operated 18 months ago the sound tube was left.

Dr. Parish remarked that but a very small minority of the women who contract gonorrhœa ever have salpingitis. What is the determining cause? He has seen cases of gonorrhœa that were greatly aggravated by treatment at the menstrual period.

Dr. O'Hara inquired if the majority of operations were in prostitutes or married women.

Dr. M. Price remarked that according to his experience 75 per cent. of all the men had gonorrhœa. They did not all have epididymitis. The proportion of cases of salpingitis to gonorrhœa in females was about the same as epididymitis to gonorrhœa in males. He had operated for salpingitis in both married women and prostitutes.

Dr. Joseph Price exhibited

A VERY LARGE TUMOR,

which he had removed by enucleation from the broad ligament; he had shelled it out completely after applying the nœud low down. After he had started the enucleation he discovered that the lymphatic glands along the spine were enlarged, and at once knew that the tumor was malignant in character. He also exhibited

A LARGE DERMOID TUMOR

of the left ovary; he found in it a tooth and spiculæ of bone. The patient was dying from general peritonitis. In the cyst wall he found signs of free hemorrhage, taminated clots and fluid blood, and under the peritoneum and in the peritoneal cavity. He exhibited a

PYO-SALPINX;

the tubes were large and distended with pus.

Dr. H. A. Kelly exhibited an

OVARIAN SARCOMA

ten inches in diameter. The patient was a little girl. She was now well. He would not approve of an operation when the glands were already involved.

Dr. Joseph Price replied that the oper-

ation had gone too far, when he discovered the condition of the glands, for him to stop. After the broad ligament is opened the operation should be completed if possible. The patient was in extreme danger throughout the operation from the enormous venous sinuses that were in danger of being ruptured.

Dr. M. Price exhibited a

LARGE OVARIAN CYST.

Miss Rebecca W., age 79 or over. The weight of the tumor was estimated at 50 pounds. Operation May 26th, 1887. Patient much emaciated. The tumor generally adherent posteriorly; those under the right kidney and liver were ligatured by five ligatures and the tumor cut away; the bleeding was checked by hot water irrigation. The pedicle was broad and vascular. There was a large hematocele posterior to the uterus, and dark clots were removed by the hand and sponging; a mass was removed resembling in appearance fecal matter, but absolutely free from odor; it was probably part of the hematocle, as the bowels were in good condition. There was jelly-like substance back of the liver and spleen and much other filthy matter difficult to account for. Time of operation one hour. Eight days after operation the patient was doing well and has had no trouble. She is childish and has to be watched day and night.

PHILADELPHIA CLINICAL SOCIETY.

STATED MEETING HELD MAY 27, 1887.

The President, JAMES B. WALKER, in the chair.

Dr. Henry Hartshorne made some remarks on

THE SCOPE AND PRESENT ASPECTS OF PREVENTIVE MEDICINE.

"This term," he said, "may be held to be synonymous and coëxtensive with hygiene; or, if we please, it may be regarded as applying only to the study of the direct causes of disease, and the methods of antagonizing them. Under this view, while personal hygiene must include especially the subjects of diet, exercise, care of excretions, clothing, bathing, sexual and mental hygiene, the topic of domestic and public hygiene are more or less common ground, as, *e. g.*, ventilation, water supply, drainage and disinfection. Bacteriology clearly belongs to preventive medicine, and so does sewerage, as well as public vaccination, inspection of food supplies, suppression of nuisances, ship and railroad inspection, etc.

That all our medical colleges do not have chairs of hygiene, and preventive medicine, must be due to the fact that when their *curricula* were organized, sanitary science had not acquired enough substance and shape to claim such a position. It is quite otherwise now. Standing between physiology and medical practice, hygiene comprises a body of knowledge whose *elements*, at least, should be in the possession of every medical graduate. It should be a required study in every winter course, in full rank, with lectures, demonstrations and examinations.

As to the *present aspect* of preventive medicine, it is receiving yearly increasing attention, not only in the profession, but on the part of intelligent men and women everywhere. Knowledge advances in regard to it more rapidly, and with many more signal successes, than in practical therapeutics. Yet, in both of these departments, the same kind of obstruction to real scientific progress appears, from too great haste and facility in the adoption of *unproved hypotheses*, because of their apparent convenience as working theories. This causes important facts to be often pushed out of sight; and excessive stress on certain measures harmonizing with *current opinions* induces the neglect of other precautions or expedients which are really of practical value."

Dr. Hartshorne illustrated this view by allusion to the want of full appreciation, by not a few sanitarians, of the pre-

ventive service rendered by chemical disinfectants even when these are not so used as to be sure to destroy all bacteria and their spores. "*Continuous* chemical disinfection (of house-drains, sewers &c.), especially, has not yet come to be estimated nearly at its full value. Bacteriology, at present, holds the lion's share of attention in preventive medicine."

More than twenty years ago Dr. Hartshorne, in some University lectures on Epidemic Cholera, (published in 1866) expressed the conviction that the specific cause of cholera must be a *minute organism.*

While thus early in such an opinion he believes that true scientific caution imposes careful sifting of evidence, before the *discovery* of a pathogenic microbic causation is accepted as a matter of fact. "Such caution is not generally observed. All may remember Dr. O. W. Holmes' 'song of the stethoscope'; what a wonderful *bruit de diâble* was made by a hidden fly in the instrument. May we not fear that, not a fly, but some lesser thing in life, in the *microscope* may occasionally get the credit of more pathogenic significance than belongs to it?"

"For instance: Very much has been said about the origin of the Plymouth, Pa. Typhoid fever empidemic, from the *bacilli* contained in the excreta of a man having typhoid; which excreta, at the latest, were thrown out of a window three weeks before the thawing of the winter's frost, some feet or yards from the edge of a stream, that stream furnishing a part of the water supply of the town of Plymouth. Wonderful tenacity of life these bacilli must have had, to endure not only three weeks of freezing temperature (which Drs. Billings and Prudden have recently shown they *might* possibly survive) but also exposure to the air, on the open ground, for that length of time! What violence, too, these same bacilli, on that supposition (the correct theory) must possess. Small pox virus is nothing to them; a confluent small pox institute, out on the ground for three weeks, would be a little-to-be-dreaded thing. Yet, when Dr. Steinberg puts this same virulence to the experimental test, with animals,* he finds as many others had also found, that the typhoid bacillus has no specific characteristic action upon the lower animals; that there appears to be a pathogenic (toxic) power of *cultures* of this bacillus, when injected in considerable *quantity* into the bodies of rabbits, &c. But these cultures contain both the bacillus and the ptomaine produced, and experiments show that the pathogenic power of the cultures cannot be ascribed to the direct action of the bacillus, and that there is nothing specific or characteristic in the effects produced.

Still, these frozen, down-trodden bacilli, after three weeks exposure, are charged with the whole deadly work of an extended and fatal epidemic; ignoring the fact that, as Prof. Kedzie, of Michigan, proved by a number of analyses, the water supply, both of the stream and of the wells of Plymouth was, at this time, as bad as drinking water could be; while, also, the fact that the water of the stream, almost dry from prolonged drought, had to reach the town through *four reservoirs*, a certain cause of stagnation and impunity, was forgotten altogether."

Dr. Hartshorne cited the remark recently made by Dr. Percy Frankland, of London, that the chemical side of bacteriology is the side now most needing investigation; and the testimony of Col. Waring, in an address last year before the Philadelphia College of Physicians, to the usetul junction of certain bacteria, demonstrated by the experiments of Frankland, Schlvessny and Wuntz, in effecting the purification of sewage passed through the soil; that purification was arrested when the soil was, for a time, made sterile by saturation with chloroform.

Mention was also made of the large prevalence of the current theory concerning cholera: "That it extended only by means of the contagious property of the stools of patients ill with it; a hypothesis, not only not proven, but against which stands facts (*e. g.*, of the

**Medical News*, April 30th, 1887, pp. 483, 484.

outbreak of cholera on ships two weeks or more at sea), showing that it *cannot* possibly be true. Here the teaching of few leaders of medical opinion, and the convenience of a working theory, have fastened upon the public mind a misconception which it may require half a century to annul."

Lastly, Dr. Hartshorne spoke of a needed advance in public hygiene, concerning a certain class of destructive nuisances.

"While some limitation is placed, by law, upon the abuse of poisonous and dangerous drugs, one narcotic which, in the way it is commonly used, either maddens or stupefies, is sold almost unrestrictedly. This agent, belonging to the ethyl chemical series, does such an amount of obvious mischief that sanitarians should protest energetically in favor of the suppression of its open sale on our streets, even if moralists and philanthropists were silent about it."

Treatment of Sciatica with Osmic Acid.—Neuher first suggested osmic acid as an anti-neuralgic remedy, and published the results of three cases, two of sciatic neuralgia, and one of the facial. From ten to twenty-five injections were required to effect a cure. Eulenburg obtained three radical cures and four ameliorations out of twelve cases. Many others have used it with very much the same results, *i. e.*, with benefit in some cases and without benefit in others. In his own practice, Dr. Stékoulis tried it in ten cases (six men and four woman) of idiopathic sciatica, the duration of which varied from fifteen days to two years. The result of the treatment was eight successes, one much improved, and one in which the remedy proved inert, after four injections, beyond which the patient refused to go. Its effect is explained by the well-known effect of osmic acid on certain constituents of nerve-tissue. No abscesses or other inconvenience followed its use beyond the pain at the time of the injection. An aqueous solution, containing one per cent. of acid, is injected. The injection should be made *loco dolenti*, at first daily, and then less frequently.—*London Medical Record.*

Treatment of Infantile Eclampsia.—In the course of a well-written article on this subject by Dr. Jules Simon, in the *Journal de Médicine de Paris*, he says: "Since the digestive tube is almost invariably the seat of the prime cause of infantile eclampsia, our first care should be to evacute the intestine by purgative lavements. If possible, an emetic should be given by the mouth, but if the convulsions do not admit of this, an injection containing 7 grains of chloral, 15 grains ot camphor and 20 drops of tincture of musk should be given by the rectum. Where the spasms have a tendency to recur at intervals of several hours, and there is no fever, a mustard bath will be found of great service. If convulsions persist, a blister should be applied to the back of the neck, which should be left in place for three hours only, and be replaced at the expiration of this time by a cataplasm. At the same time the following may be administered:

℞	Potassium bromide,	gr. xv to xxx.
	Musk,	gr. iss.
	Cherry-laurel water,	ʒ iv.
	Syrup of codeine,	ʒ iss.
	Slippery elm water,	ʒ iii.
M.	Simple syrup, enough to sweeten.	

The dose is a tablespoonful repeated p. r. n. It will be seen that M. Simon differs from Trousseau and others who are opposed to blisters and mustard, but he orders these cutaneous revulsives only when the patient is insensible and when they consequently cannot excite reflex convulsive effects. In convulsions due to albuminuria or uræmia, Simon recommends the application of leeches, one or two behind each ear, or to apply the scarificator and cups to the lumbar region and take from one to two ounces of blood. Even anæmic children will stand this loss under the circumstances. Children which seem predisposed to eclampsia and have frequent attacks should receive small doses of potassium bromide (3 or 4 grains) repeated from time to time, every three or four days.—*St. Louis Medical and Surgical Journal.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JUNE 25, 1887.

Editorial.

THE NATURE AND TREATMENT OF CHOLERA INFANTUM.—During the next few months no subject in medical practice will arouse greater interest in the mind of the general practitioner of medicine than the treatment of cholera infantum or summer diarrhœa. The great prevalence of this affection among children in all large cities and its difficult management should not fail to invite a careful study of the subject from a practical standpoint. Among the causes assigned for the prevalence of diarrhœal troubles among children, are heat, atmospheric conditions and improper food. Whilst the first two causes named have an undoubted influence there can be little doubt of the fact that the chief factor at work is the food supply. Foods and their decomposition have been made the subjects of careful investigation by Prof. V. C. Vaughan, of Ann Arbor, Mich., and this distinguished chemist has succeeded in isolating a poisonous ptomaine in decomposed milk which is now shown to play a most dangerous rôle in causing sickness and death.

Three years ago Prof. Vaughan discovered in poisonous cheese a ptomaine which produced nausea, vomiting and diarrhœa. Later this same poison was found in ice cream and in milk. Chemically this poison is known as diazobenzol, which may be made artificially by the action of nitrous acid gas at a low temperature upon the nitrate, butyrate, or other salt of anilin. It is decomposed when heated to near the boiling-point. It is developed in milk by the growth of a germ, which multiplies very rapidly when the conditions are favorable. The favorable conditions consist principally of exclusion of air, or the presence of a limited supply of air, and a comparatively warm temperature, the germ developing most rapidly at about 98° F. Uncleanliness increases the tendency of milk to decompose, and the improper feeding of the cow tends to produce the same putrefactive changes.

From one grain to one and a half grains of this poison administered to cats causes death within two hours. The administration of smaller doses leads to vomiting, diarrhœa, rapid emaciation and death from exhaustion. "In other words", says Prof. Vaughan, "it establishes a cholera infantum condition."

Prof. Vaughan claims that this same poison is an important factor in the causation of cholera infantum and similar diarrhœas, the violence of the attack varying with the amount of poison present. The fact that cholera infantum is most prevalent among the poor classes of our large cities where fresh milk is almost unknown, that it is mostly confined to bottle-fed children and is rarely met with among children fed at the breast and on pure milk add strong evidence in support of this theory.

Prof. Vaughan does not claim that decomposed milk is the sole cause of summer diarrhœas in children nor does he claim that tyrotoxicon is the only poison that may be developed in milk. He holds that it is only one of a large class of bodies which are produced by putrefaction, and many of these are cathartic in action. In a paper on this subject published in the *Medical News*, (June 18th, 1887) Prof. Vaughan offers the following rules concerning the care of milk which if enforced will aid in the prevention and in the treatment of these diseases.

"1. The cows should be healthy, and the milk of any animal which seems indisposed should not be mixed with that from the perfectly healthy animals.

2. Cows must not be fed upon swill, or the refuse of breweries, or glucose factories, or any other fermented food.

3. Cows must not be allowed to drink stagnant water; but must have free access to pure, fresh water.

4. Cows must not be heated or worried before being milked.

5. The pasture must be free from noxious weeds, and the barn and yard must be kept clean.

6. The udders should be washed, if at all dirty, before the milking.

7. The milk must be at once thoroughly cooled. This is best done by placing the milk can in a tank of cold spring water or ice-water, the water being of the same depth as the milk in the can. It would be well if water in the tank could be kept flowing; indeed, this will be necessary, unless ice-water is used. The tank should be thoroughly cleaned every day, to prevent bad odors. The can should remain uncovered during the cooling, and the milk should be gently stirred. The temperature should be reduced to 60° F. within an hour. The can should remain in the cold water until ready for delivery.

8. In summer, when ready for delivery, the top should be placed on the can and a cloth wet in cold water should be spread over the can, or refrigerator cans may be used. At no season should the milk be frozen; but no buyer should receive milk which has a temperature higher than 65° F.

9. After the milk has been received by the consumer, it should be kept in a perfectly clean place free from dust, at a temperature not exceeding 60° F. Milk should not be allowed to stand uncovered, even for a short time, in sleeping or living rooms. In many of the better houses in the country and villages, and occasionally in the cities, the drain from the refrigerator leads into a cesspool or kitchen-drain, this is highly dangerous; there should be no connection between the refrigerator and any receptacle of filth.

10. The only vessels in which milk should be kept are tin, glass, or porcelain. After using the vessel it should be scalded, and then, if possible, exposed to the air.

With the attention demanded by these rules given to milk, it will become more valuable as a food, and the development of poisons in it before its introduction into the body will certainly be prevented."

But in the prevention of summer diarrhœas attention to the food must not stop with its introduction into the body. Fermentation which produces tyrotoxicon may take place in the stomach. Attention must therefore be given to digestion. Indigestion must be combatted by giving wholesome food, in proper quantities and at proper intervals. Water instead of milk should be given to quench thirst. The depressing effects of extreme heart upon the nervous system should be obviated.

Prof. Vaughan discusses the curative treatment of these diseases in a practical way. The first thing to do, he says, is to stop the administration of milk in any form. The food used may consist of chicken and mutton broths, beef juice, and rice or barley water. The alimentary canal should next be cleansed as thoroughly as possible. Castor oil and copious enemata of water are suggested for this purpose. Either an astringent or disinfectant may be added to the latter.

The next step is to arrest the growth of the germ. The germ develops only in acid media. Chalk mixture is therefore suggested. In the preparation of the mixture, glycerine instead of syrup should be used.

Prof. Vaughan has been unable as yet to show the influence of germicides upon the poison. This subject he is at present working out and he hopes later on to ascertain the effect of certain germicides on the development of this poison. The work thus far done by Prof. Vaughan is of the most useful character and his suggestions should receive the widest publicity and observance.

Miscellany.

The Two Aspects of Phthisis.—In dealing with phthisis, we are always prone to regard it mainly either as a true lung-disease or as a constitutional

malady, with a pulmonary lesion as its most constant, and usually most important, local expression. The former is the tendency of the student and young practitioner, who are apt to think that through the stethoscope may be learnt most of what is worth knowing about the disease; the latter becomes more and more the view which arises from a wide experience of phthisis, and gradually impresses itself upon us as vitally important, especially with regard to prognosis and treatment. Dr. H. G. Sutton puts this strikingly in his recently published and profoundly suggestive lectures on *Medical Pathology*. He says: "In considering phthisis and the treatment of phthisis, do not think of the lungs so much, for it is simply harassing to one's self, and leads to the death of the patient, and no one benefits by it. How can a lung be repaired if there is not sufficient blood going through it? The one object in the treatment of phthisis is to get more blood through the lung to repair it; hence the importance of rest, food, and fresh air."

All the main principles in the treatment of phthisis now generally adopted, namely, liberal dietary, tonics, open-air life, change of climate, etc., aim at the improvement of the constitutional condition, the assumption underlying these measures being either that the local condition is inaccessible to therapeutics, or else that it may be confidently expected to improve with the improvement in the oganism generally. No doubt since the discoveries of Koch, patient and enterprising efforts have been made to strike at the real origin of the disease by measures directed to the destruction of the tubercle-bacillus. Hence has arisen the wide adoption of antiseptic inhalations, and more recently the injection of sulphuretted hydrogen, carbonic acid gas, etc.

Without seeking to prejudge the results of experiments still in progress, it must, we think, be owned that the net result of this local therapeusis has hitherto been very small. Inhalations do good unquestionably, but in what class of cases? Chiefly in old cavities filled with putrid secretion, where the *rationale* of their action is too obvious to require demonstration; but we are still without evidence of their utility in incipient phthisis; in other words, their influence in checking the development or limiting the activity of the bacillus is still an unproved hypothesis. It is to be feared that Koch's discovery, whatever may prove its ultimate value, has done mischief in the department of therapeutics, by tending to obscure the view put forward so bluntly and yet so truly by Dr. Sutton, that in the treatment of phthisis we should think of the organism, and not of a single organ.

Local measures of another kind have had a wide popularity and a certain utility in phthisis. We refer to counter-irritants, the efficacy of which has been particularly insisted upon by Professor Jaccoud. No one can try them patiently without being convinced of the resulting benefit. They relieve cough and enable us to dispense with anodynes, but it seems doubtful whether they have any other beneficial action whatever.

Many years ago it was proposed to treat early cases of phthisis by strapping the apex, after the fashion adopted so usefully in pleurisy. It may be doubted whether this practice is now ever adopted, and there can hardly be a doubt that the proposal was based upon a radical misconception of the nature and requirements of the disease. All our knowledge now tends to show that phthisis arises from inactivity, and not from over-action of the lungs; and, so far from endeavoring to limit the play of pulmonary function, one of our chief aims, apart from the actual presence of hæmorrhage, is to promote it.

While the constitutional view of phthisis is, for the present at least, much the more useful with a view to treatment, Dr. Sutton would, no doubt, be the last to deny the indispensable value of a correct estimate of the local signs. Especially is this so in diagnosis. We may strongly suspect the existence of phthisis before the lungs yield any sign, but we can hardly get beyond the point of mere suspicion. Asthenia, emaciation, night-sweats, and febrile disturbance may combine, with a bad family

history, to make us view a case with the gravest anxiety, although the stethoscope yields no abnormal indications; but, while the lungs remain free, we always continue to hope that our suspicions may prove unfounded. Again, the extent of the local lesion is always a very vital point. A patient with a cavity in one apex, while the rest of his lungs is sound, is in a very different position from one in whom we find evidence of disseminated tubercle throughout a large area of the pulmonary substance. The progress of the local lesion, which only local investigation can determine, is also a point of cardinal importance. There is the most radical difference between a case of phthisis in which the local signs remain quiescent for months or years, and one in which they creep steadily onwards. The former case allows an opportunity for treatment, and permits a more or less favorable prognosis; the latter case is sure soon to terminate fatally.—*Brit. Med. Jour.*, May 28, 1887.

Treatment by Gaseous Enemata.—Dr. J. C. Reeve, Jr., of Dayton, Ohio, communicates the following note on the use of gaseous enemata to *The Polyclinic*:

"The patient, male, 30 years, had, during the winter, pyothorax, which discharged through a bronchial tube, and can empty considerable fluid by hanging head downward out of window. Lungs deeply implicated. Amphoric breathing from nipple to shoulder-blade, the width of the hand, but this may be from pneumothorax rather than a cavity. Sub-crepitant râles over entire right lung; left lung, compensatory breathing; temperature 101.6°, resp. 30, pulse 108. Troubled with night sweats, coughing, deranged stomach.

I began injections April 16th, and on the 19th, after the third injection, he had a 'better night.' I knew nothing then of the strength of sodium sulphide, but used it saturated. After the fourth injection he said he had 'the best night in two months.' The enemata had been given daily, but about this time they were given twice a day, and on April 22d he had 'the best day since sick.' On May 11th, I found that a week before he had discontinued them, declaring they chocked him up. This may have been due to the strong sulphide. The daily temperature rose one degree after beginning the treatment.

I do not give you exact physical results, because I have not enough to be of value, the patient not being accessible. The above may interest you. I do know that during the early application his stomach and cough were much better. I am waiting to hear if treatment is resumed, and will soon try two more cases of distinct phthisis.

Poisoning by Subnitrate of Bismuth.—(*Centralblatt f. med. Wiss.*, 1887, No.5)—It has long been a mooted question whether bismuth is a poisonous metal like arsenic, antimony, and phosphorus, the group to which it belongs. A case lately recorded by Dalché appears to afford positive evidence in this direction. A woman of thirty suffered a very extensive burn of the third degree from the scapular angles to the nates on the 19th of September. On the 26th the wound was dressed with subnitrate of bismuth, and from October 3rd it was found necessary to renew the dressings every second day. On October 11th the patient complained of pain in the neck and dysphagia, and white false membranes began to show themselves on the palate, uvula and tonsils. These spots spread, the lower lip became involved, and a dark brown line appeared on the gums. There was no albuminuria. On the 13th the soft palate was sphacelous, and as the fasle membrane separated it revealed dark spots in the tissues. Diarrhœa now set in, followed on the 27th by vomiting, and both of these symptoms persisted until November 1st, when the albumen made its appearance in the urine. The bismuth dressings had meanwhile been stopped on the 27th October, whereupon no fresh patches were found in the mouth, although the dark spots continued visible for another month. The bismuth preparation proved to be perfectly pure, with scarcely a trace of the oxychloride. Bismuth was detected in the fæces and urine.—*The Practitioner.*

Electricity in the Treatment of Epilepsy.—Dr. A. D. Rockwell, of New York, recently read a very interesting paper before the Academy of Medicine of that city on this interesting subject. The following were the conclusions at which he arrived.

1. Electricity possesses a certain value in the treatment of epilepsy. It is not known, nor is it alleged, that used alone it can cure epilepsy. Used in connection with the bromides, however, its value is unmistakable, and under its use a certain proportion of patients will recover that otherwise would fail to do so.

2. It is in the nocturnal variety of epilepsy more especially that the good effects of electricity are seen, although day attacks have been successfully controlled.

3. The methods of electrical treatment that have proved most efficacious in my hands are central galvanization and general faradization.

4. When electricity fails to cure, or aid in the cure, it is often efficacious, by the method of general faradization, in affording grateful relief from nervous symptoms of an indefinable subjective character; in other words, from that general instability of the nervous system recognized under the term neurasthenia.

5. The systematic use of electricity renders the system more tolerant of the bromides, and will diminish bromic acne.

6. It is important that electrical treatment should be administered with care and judgment; especially should all interruptions of the current be avoided in central galvanization, as the resultant shock is liable to hasten rather than prevent an attack.

7. Two years must elapse without an attack before any case of epilepsy can be considered as one of positive cure.—*College and Clinical Record.*

Bicarbonate of Potassium as a Remedy for Diphtheria.—Morse recommends the use of bicarbonate of potassium in the treatment of diphtheria. The object seems to be to alkalize the blood as quickly as possible, which he accomplishes both by sponging the whole body with a saturated solution (in warm water) of bicarbonate of potash, and by administering internally, 1 to 2 grams for adults, children naturally less according to their age, every two hours day and night. He does this without in the least interfering with the functions of the stomach or with the digestion in general. In a number of grave cases he even administered the medicine every hour without observing any disagreeable symptoms. This method of treatment he pushed in 116 cases with very satisfactory results. A somewhat similar treatment is mentioned in a new work upon diphtheria, croup and tracheotomy, or rather a translation of a French book on the subject. This is Gill's Sanné on Diphtheria, Croup and Tracheotomy.— *Weekly Med. Rev.*

Treatment of Tuberculous Laryngitis by the Curette.—M. Gouguenheim, in the name of M. Hering, of Warsaw, read a note of cases of tuberculous ulceration of the larynx treated by scraping. Twenty-eight cases were treated, which were divided into three classes. In the first category were nine cases of laryngeal and pulmonary phthisis; duration of cicatrization from three months to a year, without return. In the second there were, of cases of return after cicatrization, three cured. In the third there were six cases of ulceration of the nose, of the pharynx, and of the tongue, with a bad general condition; but still in two cases cicatrization occurred, which persisted until death.—*Med. Times.*

Chronic Hypertrophy of the Ventricular Bands.—The use of resorcin, 15 to 20 grs. to the ounce of distilled water, is highly recommended in the above condition by Dr. Bernard Tauber. It is believed to act more deeply than ordinary astringents. In conjunction with the local treatment, rest of the voice is of the utmost importance, constitutional treatment must be followed when indicated, and, finally, an associated catarrhal condition of the pharynx and noso-pharynx must be relieved by local applications.—*Cincinnati Lancet-Clinic.*

Medical Items.

No man, nor any body of men, is good enough to dispense with the tonic criticism.—*Huxley.*

The Illinois State Medical Society has appropriated $750 for the International Medical Congress.

The thirty-eighth annual session of the Pennsylvania Medical Society will he held at Bedford Springs on June 29th, 30th and July 1st.

One of the largest medical fees recorded is that of $40,000 recently paid to Dr. Anderson Crichett for visiting and treating an Indian prince.—*Med. Rec.*

The Medical Standard and the *Chicago Medical Journal and Examiner* published daily editions during the meeting of the American Medical Association in that city.

There is a movement on foot to erect a new building for the New York Academy of Medicine. A very desirable site, it is said, has been selected on 57th Street between 6th and 7th Avenues.

Sulphurous Acid in Whooping-Cough.—Fumigations of burning sulphur of the bed-chamber during the temporary absence of the patient are highly recommended by Dr. Mohnk, a Norwegian physician.—*Therapeutic Gazette.*

The American Medical Association has voted that hereafter there shall be a dinner provided as one of the entertainments at the meetings and that members who attend shall pay a fixed fee which shall be different for those who do and those who do not drink wine.

The illustrious Vienna anatomist, Hyrtl, who has for some time been suffering from cataract, has had the right eye operated on by Prof. Fuchs, apparently with great success. The left eye is also affected, and will shortly have to be operated on. Prof. Hyrtl is seventy-five years of age.—*Med. News.*

Emperor William has conferred upon Prof. Esmarch, the great surgeon, the rank of nobility. Prof. Esmarch, who married Princess Henrietta, of Schleswig-Holstein, has been ignored by the royal family. It is surmised that he owes his ennoblement to his skill as a surgeon.—*Medical News.*

Dr. Zschokke, of the University of Geneva, has been making some experiments on tænia, in the course of which he himself, with six students, who volunteered for the somewhat hazardous experiments, each swallowed five cysticerci. The results show the successful propagation of the tænia in every case, except that of one student, who was, at the time, undergoing a copaiba treatment.—*Boston Med. and Surg. Jour.*

It is proposed by an anonymous correspondent to the *Union Medicale*, that Bergeon's method of treating phthisis be simplified by having the patient eat such articles of diet as, by their decomposition, will generate sulphuretted hydrogen in the intestines, thus doing away with its injection per rectum. Beans are mentioned as worth trying.—*Weekly Med. Review.*

The Milwaukee Veterinarians. — The Milwaukee *Sentinel* says that there is not a horse doctor in that city who would change places with the average family physician. They make from $3,000 to $5,000 a year, or from $15 to $29 a day, and the anxiety they undergo is not half so great as that of the man who has human patients to attend to. They charge $2 a visit, though the ailment be nothing more serious than influenza.—*Med. Rec.*

Prof. Huxley states that prior to the age of forty years he was unable to use tobacco in any form; the weed was a deadly poison to him. A few years ago he discovered that he could smoke a cigar. Since then he has greatly enjoyed smoking. He considers smoking a comfortable practice, and one productive of good. "For my own part," says Prof. Huxley, "I consider that tobacco in moderation is a sweetener and equalizer of the temper."

The *Tribune Médicale* publishes two interesting cases in which the exhibition of morrhuol, which is the active principle of cod-liver oil, proved very efficacious in disease of the respiratory organs. In one, the patient, a child aged 7, with scrofulous antecedents, as shown by frequent eruptions and impetigo, was affected with purulent pleurisy. Auscultation discovered extensive moist *râles*, and percussion revealed slight dullness at the base of the left lung. In a short time an abundant purulent effusion took place; this was drawn off, and the pleural cavity was washed out antiseptically. Three capsules of morrhuol were then given every day; although the patient had never been able to take cod-liver oil these were swallowed and digested with facility. A month after the operation the little patient was in a most satisfactory condition, and this has been steadily maintained for two years. In the second case, a young girl, aged 14, who was the subject of scoliosis, suffered from chronic bronchitis. The family history pointed strongly to hereditary tubercle. The general weakness of the patient made it difficult to administer nourishment. Four capsules of morrhuol were given daily; under this treatment she recovered her appetite, and rapidly gained strength. The bronchitis soon disappeared; at the date of the report the patient's general state was comparatively satisfactory. The daily quantity given need not exceed five to six capsules, but this should be continued for a considerable length of time.—*Brit. Med. Jour.*

Original Articles.

NOVEL METHOD OF EXPRESSING THE PLACENTA.

BY WM. PAWSON CHUNN, M.D.,

Chief of Clinic to Diseases of Women and Children, University of Maryland. Assistant Surgeon to the Hospital for the Women of Maryland.

The following case adds one to those already narrated when in the third stage of labor the "let alone policy" was employed in preference to the immediate extraction of the placenta. In my opinion (with the exception of extra-uterine pregnancy) the secondines if retained should be removed within forty-eight hours after labor.

In the present instance I was called to see a patient, aged 23 years, the mother of one child, who had been bleeding almost continuously for three weeks. When the hemorrhage began she had missed three menstrual periods and she believed herself about three months pregnant. As the hemorrhage continued from day to day with bearing down pains accompanied by chills and fever, and as nothing was done by those in charge she finally sent for me, and a vaginal examination revealed the following condition :

The uterus was perfectly moveable and about as large as a good sized lemmon. The cervix was somewhat hard and did not permit the introduction of the finger; from the cavity of the uterus proceeded a foul-smelling bloody discharge. This examination afforded sufficient ground for diagnosis and treatment. I ordered hot water injections and decided to return in the morning to dilate the cervix mechanically and empty the uterus of whatever it contained. With this idea in view I visited the patient the next morning and with the assistance of Mr. John Williams (undergraduate) arranged the patient on a table in Sims' position and with his speculum introduced. Under the hot water injection the cervix had softened and dilated during the night. I had not expected to find this condition and consequently had no placental forceps or curette with me. I had an instrument with me, however, which proved just as good, if not better, without my knowing it. This instrument was nothing more nor less than Sims' vaginal depressor modified by Dr. Nott so that the extremities are triangular instead of circular, the sides of the extremities being slightly concave so as to make effective pressure on any cylindrical body. In order to get the cervix into view, the uterus being decidedly anteverted, it was found necessary to make strong pressure up in the anterior cul-de-sac of the vagina and also consequently upon the fundus of the uterus. This pressure being continued and the cervix having come into view, I was greatly surprised to see a small mass make its appearance at the *os externum* which had not been there previously. In order to seize this substance I turned to get an ordinary pair of dressing forceps near by on a table and in so doing allowed the vaginal depressor to slip and thus remove the pressure from the fundus. Upon turning again the mass had disappeared into the cavity of the uterus. This circumstance led me to believe that if I could make sufficient pressure, high enough up upon the body of the uterus with the vaginal depressor I could squeeze out the secundmer without much trouble. Accordingly a large heavy tenaculum was fixed in the anterior lip of the cervix and the uterus pulled well down to the vulva. The depressor was then pushed as high up as possible in the anterior cul-de-sac and steady pressure being made backward and upward, the placenta again appeared at the mouth of the womb and was gradually but completely forced through the *os externum*. The uterus here being comparatively small, so that it lay in the hollow of the sacrum when pulled down by the tenaculum was pressed between the sacrum on one side and the depressor on the other in such a way as to allow of its contents being literally squeezed out. The patient is now well. I was not aware at the time that the placenta had even been expressed in this manner nor have I seen anyone since who has used this method.

Lectures.

THE CAVENDISH LECTURE

ON A

SPEEDY AND SOMETIMES SUCCESSFUL METHOD OF TREATING HAY-FEVER.*

Delivered before the West London Medico-Chirurgical Society.

BY SIR ANDREW CLARK, BART., M.D., F.R.S.

Emeritus Professor of Clinical Medicine, and Consulting Physician to the London Hospital.

It has been sometimes said by way of reproach that the scientific workers in medicine, although eager in the pursuit of knowledge, were careless of its practical applications to the treatment of disease. If at any time this reproach was a just one I do not know, but beyond all manner of doubt it would be a just one now, for in almost all countries and in nearly every school of every country, you can see not only the earnest pursuit of knowledge, but the most zealous efforts to force it into fruit for the uses of men; and in the study of no subject could you find a better proof of this than in the study of hay-fever, of which I am about to speak. From Blackley of Manchester to Mackenzie of Baltimore you will find a succession of inquirers whose efforts to discover the nature of this malady have been accompanied by efforts equally earnest and persevering to discover its most appropriate treatment. And from America, most earnest and persevering of all countries at work, we have received the largest and best fruits of this double pursuit. And to-night the plan of treatment of hay-fever which I shall have the privilege of submitting to your consideration is entirely founded upon a physiological study of the disease. It is, however, with the results of this study only in so far as they bear broadly and directly upon treatment that I propose to occupy myself. With minute discussions as to the nature of hay-fever, its physiological and pathological relations, and the causal agencies engaged in its evolution, I shall have to-night only an indirect concern. Nevertheless, as I wish to set for the true grounds for a rational treatment of this malady, such discussions cannot be passed over entirely.

Before proceeding further, I wish to pause a moment, and advert to the name by which this malady is known. From nothing has medicine suffered more than from hypothetical naming. What may seem to be the correct and adequate hypothesis of to-day may become the incorrect and inadequate hypothesis of to-morrow, and when the true nature of a malady is discovered, the diffusion of the discovery is hindered, if not prevented, by the retention of a name which, established by custom and continued from convenience, conceals the truth and perpetuates the error. I could adduce few better illustrations of this than the naming of the disease under consideration. The epithets of hay-fever, hay-asthma, pollen-fever, rose cold, and peach-cold are widely open to this objection. They withdraw the attention from internal states, and they tend to narrow our ideas of causality within the limits of outward things. It is true that the pollen of certain grasses is the most common exciting agent of the paroxysm of hay-fever, but it is also true, for it has been demonstrably proved, that the paroxysm can be excited not only by other external agents, such as light and heat and dust, but also by local affections of the nose and throat, by irritations propagated from distant parts, and by influences generated *de novo* in some part of the central nervous system. It is only of late, and through reseaches made for the most part in America, that we have come to a knowledge of these facts. Even there, however, the tendency to hypothetical naming continues, and the term proposed by Mackenzie of Baltimore, to whom we owe so much of what is best in our recent knowledge of this subject, is not free from grave objections. He calls the disease periodic vaso-motor

*From the *British Medical Journal*, June 11, 1887.

coryza, but in this designation there is involved a hypothesis which to-day may be doubted, and which to-morrow may be disproved. Nor are the epithets proposed by myself—periodic specific coryza and periodic nervous coryza—free from just and grave objection. We are thus in need of a proper name for our malady. No one can be rightly framed except out of its commoner physical characteristics, and no one can be safely used unless it shall imply no hypothesis, and be capable of remaining always the same however much our theories of the disease may change. Of the innumerable persons exposed in similar, if not identical conditions, to the exciting causes of hay-fever, only a few are affected with the disease, and of those few there are, strange to say, scarcely any among agricultural labourers and gardeners, who are habitually exposed to the pollen of grasses believed by some authors to be the sole causal agents of the development of the asthmatic paroxysm. It seems, therefore, only fair to conclude that in the evolution of the malady some other agent than the external exciting cause must be directly concerned. Further investigation proves this conclusion to be correct. From experimental examination we learn the existence of a second factor in the production of this disease, a factor which resides in the mucous membrane of the nose, mouth, pharynx, and eyes, which mainly concerns the nerves of these parts, and which manifests itself in all their histological constituents by a peculiar irritability of reaction to certain excitants.

Furthermore, when in cases exhibiting this peculiar local irritability we pursue our inquiries into the characters of the constitutional state associated with it, we discover certain *bizare* symptoms of disorder which belong exclusively to the nervous types of organisation, and which stamp the organism exhibiting them as specifically and pathologically "nervous."

Lastly, if, pursuing our investigations further still, we institute an analysis of the *differentiæ* distinguishing the nervous constitution of cognate affections, we are led to the conclusion that they reside for the most part in the respiratory and vaso-motor centres, and in the ganglia connecting and connected with both.

In this way we discover reasons for believing that there are three great factors concerned in the evolution of hay-fever, the nervous constitution, the irritable local state, and the exciting cause. As a general rule to which there are some remarkable exceptions, all these factors, although in varying degrees, co-operate in the development of an attack of hay-fever. Concerning each of them I have to offer a few observations which will make plain the ground upon which a rational treatment of this malady can be based.

The nervous constitution associated with hay-fever is sometimes inherited and sometimes acquired. For the most part inheritance comes from the arthritic and the nervous. When acquired, it is acquired most easily by those who are most closely subjected to the complex influences of over-civilization, who lead laborious, sedentary, and intellectual lives, as well as by those who, avoiding the difficulties and discipline of life, seek luxury with ease, by those who become weak through failure to exercise their strength. And when once hay-fever appears it exhibits still further the closeness of its relationships to the nervous system by choosing the man before the woman, the educated before the ignorant, the gentle before the rude, the courtier before the clown. Some of the more general affinities of hay-fever are harder to be understood. It prefers the temperate to the torrid zone, it seeks the city before the country, and out of every climate which it visits it chooses for its subjects the Anglo-Saxon, or at least English-speaking, race.

And now concerning the second factor in the evolution of hay-fever—the condition of the mucous membrane of the nasal cavities and parts adjacent—we have divers and some diverse views. All observers are agreed that there is some pathological condition of the affected parts, but no two of them are agreed as to its exact nature. For my

own part, I conclude from the investigations which I have pursued into the matter that there is one fundamental condition which reconciles all these varied and sometimes opposing views. This condition is one of irritability, and the irritability is of a sort which involves the nervous, vascular, lymphatic, cellular constituents of the affected parts and, when excited, disturbs the chemical, morphological, and secretory changes taking place therein. When this local irritability is provoked into action there arises a series of local structural changes which are all but characteristic of the paroxysm of hay-fever. The erectile tissue becomes distended, the blood-vessels are gorged with blood, groups of lymph-cells fill the lymphatic spaces, the mucosa is crowded with migrating leucocytes, younger epithelial cells are vacuolating and proliferating, secretion is increased in quantity and altered in character and composition, sensation is sharpened, altered, or benumbed, and the whole metabolism of the affected region is profoundly disordered.

These local changes are always present in the paroxysm of hay-fever, and whenever they concur and co-operate it may be safely said that hay-fever is present. When this local irritablility exists in an extreme degree, almost any exciting agent—an odor, a vapor, dust, a touch, light, or heat—will quickly call forth the whole series of structural changes already described as almost exclusively characteristic of the paroxysm of hay-fever.

And now let me speak shortly of the third factor engaged in the evolution of this malady—that is of the external, exciting, or determining causes to which it is commonly ascribed. Authors in general, from Gordon in 1820 to Mackenzie in 1886, advocated the view that the paroxysm of hay-fever is due, in persons of a certain idiosyncracy, exclusively to the action of the pollen of grasses or flowers upon the mucous membrane of the nasal cavities and adjacent parts. In support of this view, it is contended that the disease occurs only during the season when certain grasses and flowers are in blossom, that it may be artificially induced by the application of pollen to the nasal mucous membrane, and that it may be prevented from occurring, or may be cured when present by dwelling on board ship at sea where no pollen is to be found. Now whilst it must be admitted that these contentions are in some degree just, and that the most common exciting cause of the hay-fever paroxyism lies in the action of the pollen of certain plants upon the mucous membrane, it cannot be denied that they require qualification, and that they are inadequate to a complete explanation of all the facts which make up the history of this disease.

For on this side it may be contended as proved that the malady is less common among agricultural laborers and gardeners than among other persons, that sometimes it occurs at other seasons of the year than in hay season, that it has been induced by local irritants in which pollen did not exist, that it has occasionally arisen in consequence of irritation in a part with which the nose is in sympathy, and that the mere action itself of pollen upon the nasal mucous membrane is insufficient to provoke a complete paroxysm of hay-fever. For myself, I am compelled by my inquiries to adopt the view that in the evolution of almost every attack of this malady the three factors already mentioned are at work—the nervous constitution, the local irritability, the external cause—and that, whilst this last is most commonly a pollen acting more in virtue of its physical characters than of its intimate nature, it may be any other agent capable of calling into action the irritability of the parts concerned in the mucous membrane of the nose.

And now, when we consider these facts and theories of hay-fever with the view of framing a rational plan of treatment, we find ourselves beset on every side by difficulties. Theoretically the objects to be achieved by treatment are —the soothing and strengthening of the general nervous system, the allaying of local irritability, and the removal of the exciting cause.

To remove the exciting cause, or

rather, speaking correctly, to remove the susceptible person from it, is to prevent the oncoming of the disease, and if you send him to sea or to the summit of some Alpine height, you will assuredly succeed. There are, however, many who cannot follow this counsel, and who must remain under the influence of the exciting cause of the malady. What can be done for the patient in such circumstances? We may strive to strengthen by tonics the weak and irritable nervous constitution, and Morell Mackenzie has had some success with valerinate of zinc and assafœtida, whilst Blackley has failed with every drug he has tried. By common confession general treatment, although not useless, is never by itself successful.

We are therefore compelled to turn to the study of local treatment, which although not useless, is never by itself successful.

The first plan is to *allay* the irritability of the nasal mucous membranes.

The second plan is to *exhaust* the irritability of the nasal mucous membranes.

The third plan is to remove or to modify, or to destroy by caustic or by cautery, galvanic or igneous, such portions of the nasal mucous membrane as are found, or are believed to be, the seat of the pathogenic irritability. This third and most radical plan of treatment is practised for the most part, I believe in America, and in the hands of Daly of Pittsburg, Roe of Rochester, and Mackenzie of Baltimore, it has been followed by lasting and signal success. But as there are not as yet materials sufficient to form a critical estimate of the relative value of this mode of treatment, as I have myself no personal experience of the practice of it, and as in this imperfect lecture my chief object is to submit to your consideration the plan of treatment designed and practised by myself, I dismiss for the present from further consideration all operative procedures of this radical kind.

The first plan of treatment proposes to prevent or to cure hay-fever by allaying the pathogenic irritability of the mucous membrane. This was the object which I endeavored to achieve when I began my therapeutical experiments in the treatment of this disease. From trials extending over several years, no remedies of this sort, except aconitine or atropine, returned me any results of the smallest value, and the results returned by the use of these alkaloids were so insignificant, and the effects following it were sometimes so disagreeable, that I abandoned my inquiries in this direction. The introduction of cucaine, however, and its recent employment in the treatment of hay-fever, induced me to reopen my experiments in this direction. At first my success was considerable, for three out of five cases were immediately relieved, and the relief was maintained by the frequent renewal of the application of cucaine to the nasal mucous membrane. But when, last year, my experience of the use of this drug somewhat increased, my success in using it diminished. In one case the application failed and disagreed; in another case it neither disagreed nor failed, but I was quite unable to discover in the patients the grounds of this difference of action. Nevertheless, although it appears to me that the success of cucaine as a local remedy in hay-fever has been over-rated, although the necessity of frequent application is troublesome, and although its use is not free from inconveniences which might eventually prove something worse, I am of opinion that its success and its comparative freedom from injurious consequences are sufficient to justify, with careful watching, a longer and larger trial.

There are three ways of using cucaine in the local treatment of hay-fever; it may be used in the form of a solution, of a spray or of a nasal bougie. Personally I prefer to use a solution varying in strength from 5 to 15 per cent., and I apply it to the interior of the nose and back of the soft palate by means of a large camel-hair pencil attached to an aluminium shank, and bent at an appropriate angle. For use in the form of nasal bougies, from a quarter of a grain or more of the hydrochlorate of cucaine is dissolved in a mixture of gelatine and glycerine, and made of different weights

and shapes, according to the peculiarities of the case in which they are to be employed. For using cucaine in the form of spray, some efficient and ingenious spray-producers have been invented. Many of them have been furnished with nozzles so constructed that the spray can be applied directly to almost any part of the nasal and pharyngeal cavities. These spray-producers, with weak cucaine solutions, are sometimes very useful in allaying the small but still troublesome irritation which, in the intervals of the hay-fever paroxysms, is apt to arise in the ears, eyes, and mouth. By the great kindness of Mr. Martindale, to whose pains, intelligence, and accuracy in matters of this kind we are all so much indebted, I am enabled to show you these preparations of cucaine, and all the instruments wherewith they are used.

I come now to consider the second plan proposed for the local treatment of hay-fever. The object of this plan, which includes constitutional treatment, is to subdue the irritability of the nasal mucous membrane to such an extent that it shall no longer react to special or common irritants, whether pollen or dust, in a pathogenic manner. In the first place the patient is put upon such a regimen as will conduce most to the improvement of his general health. He is instructed to have a simple but liberal dietary, to be extremely moderate in the use of alcoholic stimulants, to have daily exercise, to follow early hours, and to continue, if that be possible, even at the cost of suffering, his ordinary occupations. If the patient is very weak, he is instructed to take with meals drachm doses of Easton's syrup, with three or more drops of the solution of hydrochloric of arsenic. If he is nervous as well as weak, I prescribe for him, in their full respective doses, tartarised iron, ammonium bromide, tincture of nux vomica, and solution of arseniate of soda. In some cases I think that I have seen great benefit follow the use, thrice a day, of five grains of sulphate of quinine dissolved in citric acid, and given in effervescence with carbonate of ammonia. For the strictly local treatment, there are required a common laryngeal brush and carbolic mixture. This mixture is composed of glycerine of carbolic acid one ounce, hydrochlorate of quinine, one drachm, and a two-thousandth part of perchloride of mercury. Heat will be required in order to dissolve the whole of the quinine; without heat, Mr. Martindale informs me that the glycerine of carbolic acid will dissolve only half the quantity prescribed.

Let me now describe the method of procedure to be followed in applying the carbolic acid mixture to the mucous membrane of the nasal cavities. If there is much mucus in the nostrils, cleanse them by means of a douche of warm water containing boro-glyceride* in the proportion of an ounce to a pint. Dip the laryngeal brush in the carbolic acid mixture, and see that the brush is full but not over-flowing. Place the left hand on the left side of the forehead and the thumb on the tip of the nose, with the shank of the brush between the thumb and two forefingers of the right hand, and the brush itself directed upwards, push it gently but firmly into one of the nostrils, carry it as high as you can without inflicting injury, move it about so as to bring the mixture in contact as much as possible with the interior of the upper part of the nostril, and then withdraw it. With another brush filled with the carbolic acid mixture, or with the same brush washed, dried, and replenished, you complete in the manner following the two operations required for each nostril. Having the left hand in the position already described, and the right hand holding the laryngeal brush with the hair pencil directed forwards from the body of the operator, push the brush along the floor of the nostril into the pharynx, and after ensuring free contact with the adjacent parts withdraw it. If during this operation the brush is over-full, some of the carbolic mixture will fall into the throat and excite coughing or some other discomfort. When you have thus finished

*Before the introduction of boro-glyceride, I employed a five-grain solution of chlorate of potash, which was less efficient.

the treatment of one nostril, and carefully removed any of the carbolic acid mixture which may have been spilt upon the nose or lips, you will proceed to treat the second nostril in exactly the same manner as you have dealt with the first. During the performance of these manœuvres great assistance will be obtained from the left hand of the operator being placed over the left side of the face and forehead of the patient. With this hand the operator can adjust the patient's head to the various movements of the laryngel brush, and with the thumb of the same hand placed on the tip of the patient's nose, the opening of the nostril can be adjusted to a convenient size and shape. When the local effects of a paroxysm are severe, and have extended to the back part of the soft palate, it will be desirable to introduce through the mouth into the pharynx the laryngeal brush, moderately filled with the carbolic acid mixture, and there, by a manœuvre easily acquired and practised, to brush the posterior surface of the soft palate and the adjacent parts.

The immediate effects of these manœuvres differ in different persons and in the same person at different times. In all cases the effects are more or less disagreeable, and last from half an hour to half a day. Sometimes a little blood-stained mucus is discharged from the nose and throat, sometimes there is a slight frontal headache, sometimes there is a trivial cough, and occasionally you will have developed all the local phenomena of a paroxysm of hay-fever.

When advising a patient with hay-fever to submit to this plan of treatment for its relief, I have found it expedient to warn him beforehand of the disagreeable effects which sometimes follow the application of the carbolic mixture, and to assure him that they are both brief in duration and devoid of danger. When this warning is with-held, some patients will grossly exaggerate their sufferings, ascribe all sorts of injurious consequences to the application, and cover the physician with undeserved reproaches. Sometimes a single application of the carbolic acid mixture is sufficient to prevent for a whole season the return of the hay-fever payoxysm, and four times within my own knowledge it has never re-appeared. Usually two or three applications are necessary to insure a full chance of success. The length of the interval between the applications must be determined by the character of the immediate effects. If these are mild, the applications may be renewed on alternate days; but if severe, at least three days should elapse between succeeding applications.

Of the measure of success which has followed this treatment of hay-fever, now practised over twenty years, I am unable to speak with exactitude. Patients when relieved seldom, and when unrelieved never, return to record their experiences, and I have been unable to get at the subsequent histories of more than a third of the number of persons whom I have treated. It is, however, my conviction that of this roughly estimated third whose cases I have been able to follow, a half has been cured for the season and four have been cured "for good." This you will say justly is not a success of which to boast. Quite so. But if you will compare the results of this treatment with the results of every other treatment, not excepting the cucaine treatment, which is its closest rival, you will have to confess that, however small may be the measure of success, it is not one which you can afford to despise. At any rate a communication of this kind is entitled to your indulgence, in-as-much as it is an honest, although very humble, endeavour to press pathology into practice and to take away the reproach which has been cast upon us of ignoring or of repudiating the natural and just alliance which should unite in closest relationships the science with the art of medicine.

Abstracts and Extracts.

Lawson Tait.—Dr. Senn, of Chicago, now in Europe, writes to Dr. Fenger the following, which is pulished in the *Journal of American Medical Association.* (June 18, 1887). On Sunday evening, March 27, I called at the residence of Mr. Lawson Tait, in Birming-

ham. As dinner-time was near at hand, I was invited to remain to meet some of his personal and professional friends. As I had been in training for some time to acquire the proficiency of eating two dinners in rapid succession, I readily consented to avail myself of this opportunity to meet the great laparotomist in the sanctum of his own home. Mrs. Tait is proud of the distinction her husband has attained, and takes a deep interest in his work. I found it quite difficult to keep Mr. Tait in the channel of thought for discussing subjects of professional interest upon which I wished to obtain information. The evening was devoted to social pleasure and the many good things spread upon the table, and I had to submit to the inevitable. During my conversation about my prospective trip to the Continent, I was made to understand that German gynecology was not appreciated in this part of England, and that it had done little or nothing towards the advancement of modern gynecology. If I had met with such an assertion under different circumstances I should not have hesitated a moment to resent most emphatically such an insinuation, and in support of my arguments I should have quoted the results of scientific investigations and conscientious work of such men as Schrœder, Winckel, Olshausen, Hegar, Kaltenbach, Sänger, and others, whose names are household words wherever modern gynecology is known and appreciated; but under the existing conditions I had to control my temper and leave the remark unchallenged.

Mr. Tait takes great interest in specimens of antiquity, and his capacious house is one great curiosity shop. That the Tait family is childless became apparent to me by the kind attentions which were bestowed upon a fine specimen of a Maltese cat. In my mind the sight of that cat revived the memory of the useful purpose I had assigned to that brute in my researches in experimental surgery, but as I was aware that Mr. Tait entertains no kindly feelings towards experimenters, I made no suggestions in this direction. It is not necessary for me to give a description of Mr. Tait's personal appearance, as the photograph I sent you some time ago speaks for itself. If you add to the large head, the long and capacious chest and still more voluminous abdomen a pair of short legs, you have Mr. Tait as I saw him.

The next morning at 9 o'clock found me again at Mr. Tait's house, as the operations were to be performed in his private hospital, which constitutes a part of his house. I was shown into a room where a number of physicians had congregated. As we were all strangers to each other, silence reigned supreme until we were informed by one of the nurses that everything was ready. We filed up a flight of stairs and entered one of the rooms, where we found Mr. Tait standing by the side of the anæsthetized patient in his shirt-sleeves and a rubber apron. The temperature of the room was comfortable. A female assistant administered the anæsthetic, and a young physician stood opposite Mr. Tait ready to render assistance, but it soon became evident that his presence was more ornamental than useful, as the operator appeared to require no assistance. The few instruments that I saw were kept in clean pans. The often described bag containing sponges was hanging from a nail upon the wall, and was taken down and a few sponges thrown in a basin of warm water. The patient's abdomen had not been shaved, and was now sponged off lightly and covered with a rubber cloth with a slit in the centre. The first patient was a lady about 50 years of age, suffering from an abdominal tumor which extended a little above the umbilicus. The abdominal incision was made quickly and was about 2½ inches in length. The omentum was found adherent to parietal peritoneum, and the adhesions were separated by tearing. As soon as the cyst was exposed it was tapped with the blunt fenestrated trocar devised by the operator. This instrument does not cut the tissues when it is pushed through the cyst wall, and consequently extravasation along the side of the tube does not take place, a source of trouble and danger attending the use of all trocars

with a cutting edge. The pedicle of the cyst was twisted and appeared like an umbilical cord. The pedicle was transfixed with a long needle slightly curved at the end, and threaded with medium sized Chinese silk, which, after the needle was withdrawn was tied into a Staffordshire knot. The operator showed his unlimited confidence in this method of tying by dropping the pedicle at once in every instance, without examining the cut surface or separately ligating any of the visible vessels.

The immense experience Mr. Tait has had in this manner of securing the pedicle certainly entitles him to speak with authority, and after seeing him tie five pedicles I am convinced of the advantages of the Staffordshire knot over the ordinary methods of tying, and should recommend its general adoption. During the whole operation I observed that the abdominal wound was kept practically closed, either with the cyst, the pedicle, a sponge or the fingers of the operator. This I observed not only in this case but in all of the three cases, and to this circumstance, undoubtedly, a great share of the wonderful success of Mr. Tait must be ascribed. The operations are done, as it were, subcutaneously, thus reducing the danger from infection to a minimum, provided the hands of the operator, the instruments and the sponges are aseptic, and that this is the case in Mr. Tait's practice I became convinced, and his results only corroborate this statement. Mr. Tait may not be an antiseptic surgeon, but he is certainly, in principles and practice, an ideal aseptic surgeon, whether he is willing or unwilling to acknowledge such a designation. The abdominal wound was closed with four deep sutures. A small gauze compress and a thick layer of cheap cotton, with a wide flannel bandage, constitute the dressing. Time of operation and dressing, twelve minutes.

As soon as the operation was completed, the visitors were requested to retire to the same room, where I spent half an hour in meditation, trying to unravel in my own mind the mysteries which had led this wonderful man to such unparalleled success, when I was aroused from my dreaming condition to reality by another message that everything was ready. The little crowd of seekers for knowledge were led into another room, where we could hardly find time to arrange ourselves around the table when Mr. Tait was already in the abdomen with his bulky index finger, searching for ovaries. In this case the incision was a mere button-hole. We were informed that the removal of both ovaries and tubes would be done for the purpose of preventing pregnancy in the future, as the patient had suffered greatly during and after delivery on account of a contracted pelvis, including the formation of a vesico-vaginal fistula, which, however, had been cured by operation. Both ovaries and tubes were removed. It was also stated that the patient was suffering from prolapse of the uterus, and this opportunity was utilized and the uterus was stitched to the inner surface of the abdominal wound after both tubes and ovaries had been removed. The whole operation, including the dressing, occupied only seven minutes. I forgot to mention before that the dressing is first fastened upon the abdomen with numerous strips of adhesive plaster which overlay each other, and embrace about two-thirds of the circumference of the body, over which another cotton compress is applied, and retained with a broad flannel roller.

To me the indications which had led to the removal of the ovaries and tubes in this case afforded abundant food for serious thought. There can be no one who has the well being and happiness of his fellow-beings at heart, who would think that it was not desirable that this woman should again be exposed to the dangers of another pregnancy, but as a practical American it occurred to me that it would have been wiser to resort to the less hazardous procedure of unsexing her husband, which would certainly secure the same immunity at a minimum risk to life, and morally would have been more justifiable. This poor creature had suffered untold agonies, and why submit her to such a serious operation to procure sterility, when the same

object could have been reached without any danger to life by unsexing the other party?

The third operation was set for 12 o'clock. I was told the evening before that this patient was probably suffering from a pelvic abscess, and I was exceedingly anxious to see the operation devised by Mr. Tait for the radical cure of this often intractable affection. The abdomen was again opened by an incision only sufficiently large to introduce two fingers. A brief digital exploration resulted in the announcement that the swelling in the pelvis was not an abscess, but a small fibroma of the uterus. As it was claimed that this tumor must be the cause of the recurring attacks of pelvic inflammation, it was decided to again remove the uterine appendages. One of the ovaries was adherent, and required more than the usual length of time for its removal. Duration of operation and dressing, nine minutes. The explanation of the cause of the pelvic inflammation was new to me, as I had always entertained the idea that submucous and interstitial myo-fibromata of the uterus, even when of large size, seldom give rise to inflammation of the adjacent or contiguous tissues, but for the sake of the patient I hope that the interpretation of the case was correct, and that the operation will be the means of preventing future attacks, as the patient who has lost one of her most important organs is certainly entitled to an equivalent of happiness in another direction.

From what I gleaned from my observations in the practice of Mr. Tait, I have come to the following conclusions: 1. He is a skilful and dexterous operator. 2. He depends on a diagnosis by digital exploration in the majority of cases. 3. He removes the ovaries and tubes in cases for indications which few gynecologists would be willing to accept as justifiable for such a serious procedure. His wonderful success may be attributed to: 1, aseptic surgery; 2, small incisions; 3, no unnecessary exposure of peritoneal cavity; 4, perfect familiarity with pelvic and abdominal surgery as far as the mechanical performance of operations is concerned; 5, rapid operating; 6, careful personal supervision in the after-treatment. There can be no question that much of his success also depends on the fact that he performs his operations almost without assistance, and in this respect all laparotomists should lose no time in imitating his example. With all his faults, Mr. Lawson Tait has done much towards the advancement of gynecology, and we may learn from him many a valuable lesson which will add to our success in practice.

Intubation of the Larynx.—At the recent meeting of the American Medical Association, before the Section on Diseases of Children, Dr. F. E. Waxham, of Chicago, read a paper on intubation of the larynx, with inferences drawn form 133 cases. He said that on April 19, 1885, he performed intubation for the first time according to the method of Dr. O'Dwyer. August, 1886, he reported 83 cases with 23 recoveries, or a percentage of 27.71; since the latter report it had been his privilege to perform the operation 51 times, with 12 recoveries, making a total of 134 cases with 35 recoveries, or 26.11 per cent. There were 71 cases three years old, or under, with 15 recoveries, or 21 per cent., while there were 63 cases over three years old with 20 recoveries, or 31 per cent. The youngest patient to recover was an infant about nine months old; the oldest a child of nine years. Dr. Waxham said, in the whole history of tracheotomy where can we find a record of 71 cases of three years or under, with recoveries amounting to 21 per cent.? Indeed, tracheotomy is so rarely successful at this age, that many consider it a contra-indication to the operation. Many speak slightly of intubation, and insinuate that the operation is always performed early and often unnecessarily. Such is not the case. In his experience the operation has always been delayed, and accepted only as a last resource. It has not been performed until there has been absolutely no hope without surgical interference. Many with limited experience report a much higher percentage

of recoveries than has been given above. Some report as high as 30, 40, and even 50 per cent. of recoveries. In his practice at one time 17 successive operations were followed by 8 recoveries, or 47 per cent. In another series of cases 13 successive operations were followed by 6 recoveries, or 46 per cent. Take the age, conditions, and grades of severity, and we can hardly hope to save more than about 25 per cent., which is a larger proportion than can be saved by the majority of physicians with tracheotomy. — *Medical and Surgical Reporter.*

Forms of Typhoid Fever Simulating Remittent Malarial Fever.—Dr. I. E. Atkinson, of Baltimore, read a paper on this subject before the Association of American Physicians.

The object of the paper was to describe forms of typhoid fever in which all the usually characteristic symptoms are absent except mild fever. These cases commonly occur during the late summer and early autumn. They begin with a chill or insidiously and assume a course of a mild remittent type, never passing into a typhoid condition, never developing the characteristic symptoms of typhoid, yet absolutely uninfluenced by antiperiodic treatment. They last three, four, or even five weeks, and almost always end in slow lysis and recovery. They resemble malarial conditions, except in the persistence of fever under strongly antimalarial treatment, and in the occasional concurrence of circumstances pointing to a typhoid origin. There is no hebetude, the patient sleeps well, the tongue is slightly coated, there is almost never epistaxis, constipation is commonly observed, there are no bloody stools, no tympanites, no iliac tenderness or gurgling, and rose-spots are usually absent. The patient is bright and cheerful. The more severe cases after beginning as remittents may gradually evolve typhoid symptoms. Three cases were reported showing the type of fever described occurring under conditions indicating their typhoid origin. While typhoid fever is one of the most characteristic of diseases, its special symptoms are very inconstant. There is not a sufficient realization of the mildness with which it often runs its course. Walking typhoid, although usually considered rare, is in reality frequent. Cases in which sudden accidents reveal their true nature are probably but a small portion of the whole number. Our views of typhoid fever have been largely modified. Low ranges of temperature are now often encountered. Straube and Fraentzel and others have reported severe forms of the disease with high mortality, although the temperature did not attain 102.2°. Normal and even subnormal temperatures are sometimes maintained throughout the attack. In mild cases a slight degree of fever-heat is not at all uncommon. Liebermeister and others report such cases. Loomis treats "mild typhoid" with walking cases, and states that the eruption appears early and is scanty and brief, and that a diarrhœa is present in most cases. This is true of many cases, but there is a large class in which constipation is the rule and rose-spots the exception—much larger than is generally admitted. Liebermeister and others describe interesting examples. Dr. W. W. Johnston has most accurately described similar cases occurring in Washington. Malaria often complicates typhoid fever, but it often happens that its presence is assumed unjustifiably. A mental bias in favor of malaria is often strongly pronounced in the face of the strongest contrary evidence. The diagnosis of these cases from remittent malarial fever often rests upon the crucial test of treatment. It is admitted that occasionally antiperiodic remedies fail to control the malarial paroxysm, especially in pernicious and adynamic forms. In milder forms the behavior under quinine practically solves the difficulty. Where the full administration of the antiperiodic remedy for a number of days fails to terminate the attack, the diagnosis of typhoid fever becomes justifiable, and the prognosis can be made with a high degree of confidence. Not often earlier than the second or later than the fourth week the fever will terminate almost constantly by lysis, rarely by crisis.

Dr. William H. Draper, of New York: I see many cases in New York which have been diagnosed as typho-malarial fever which I consider to be cases of typhoid fever. I think that the diagnosis of typhoid fever can be usually made in the course of the first week of the disease by attention to the characteristic course of the fever. The nervous symptoms of typhoid fever are of great importance in the diagnosis. In considering a disease like this we should study it in its totality and not in its elementary parts. Dr. Atkinson has spoken of the aid given by quinine in the diagnosis. My own experience confirms that of others with reference to the use of quinine as an antipyretic in typhoid fever. Unless used in such doses as to produce a certain degree of collapse it is useless; I believe that it does nothing more than to increase the discomfort of the patient. If in five or six days the use of quinine does not succeed in checking the fever we may conclude that we are dealing with a continued fever of the nature of typhoid.

Dr. John Guiteras, of Charleston: From my observation I have come to a conclusion different from that expressed by the author. These cases present no symptom of typhoid fever with the exception of the continued fever. They are so numerous as we go farther south that I would class them as a separate disease. I have examined some of these cases of prolonged continued fever of southern countries post-mortem and have failed to find the lesions of typhoid fever. My view of this fever is that it belongs to the class of functional fevers. A simple continued fever may be set up by an excessive demand made upon any of the impor ant functions of the body. I have thought that in warm climates where constant exertion was required on the part of the heat-centres to keep within limits the production of heat a paralytic condition of these centres might be induced, especially toward the close of a long and hot summer.

Dr. A. Jacobi, of New York: There is one aid in diagnosis which I have not heard alluded to, and that is the urine-test of Ehrlich. This has frequently been of much service to me. It is prepared as follows:

Solution No. 1: Sodium nitrite, 1 part; water, 200 parts.

Solution No. 2: Sulfanilin acid, 5 parts; concentrated muriatic acid, 50 parts; water, 1,000 parts.

Add one and one-fifth parts of the first solution to fifty parts of the second.

Equal parts of this mixture and the urine are to be mixed. Then add about sixty or seventy per cent. of aqua ammonia. In normal urine there will be only a slight discoloration, while in urine from typhoid fever it will be deep purple. This test is rarely applicable during the first two or three days. It generally can be applied up to the fifteenth day. It should also be stated that in cases of acute miliary tuberculosis the same reaction is obtained.—*Med. Rec.*

Hammer-toe and Hallux Flexus.—Some interesting facts relating to these deformities were brought before the Clinical Society by Mr. William Anderson, Assistant Surgeon and Lecturer on Anatomy at St. Thomas's Hospital. The condition known as hammer-toe has until recently been looked upon as a natural result of improperly-shaped boots, and in most cases has been summarily disposed of by amputation of the offending member. It is now, however, shown to present several features deserving attention, and to offer an entirely unsolved problem for the curious in pathological speculation. The actual lesion, as pointed out by Mr. Shattock and Mr. Anderson, who have investigated the matter independently, is a contraction of the inferior fibres of the lateral ligaments and of the glenoid plate, and neither muscles, tendons, nor fasciæ are at fault, except as a secondary result in very advanced cases. In typical examples the disease is confined to the first inter-phalangeal joint of the second toe; but it was shown that the condition recently described by Mr. Davies-Colley as "hallux flexus" was dependent upon changes of essentially the same pathological nature in the metatarso-phalangeal joint of the great

toe—a fact of some anatomical interest in connection with the mode of development of the first metatarsal bone. The affection is bilateral in about one-half of the cases; it is essentially one of early life, rarely if ever originating after the age of 21, and sometimes appearing during infancy; and it is often inherited. The two sexes are equally liable to the deformity of the second toe, but hallux flexus has hitherto been seen only in males. A condition resembling hammer-toe, in which several, or all, the digits are affected, is occasionally met with, but this is probably of a wholly different nature. With regard to causation, it was demonstrated that the much-abused shoemaker must be acquited of any share in the production of the deformity, although the use of ill-made boots is frequent enough as a concomitant, and may aggravate the inconveniences of the affection. These views, which were confirmed in the discussion by the remarks of Mr. Adams, Mr. Nunn, and Mr. Parker, not only open up a field for pathological investigation, but they have a very direct bearing upon the treatment of the disease. Mr. Anderson condemns tenotomy as useless, and amputation as an unnecessary mutilation, which is, moreover, not unlikely to induce distortion of the adjacent toes; but he strongly recommends the removal of the head of the phalanx (or of the metatarsal bone in hallux flexus), the joint being laid open by a longitudinal incision through the dorsal integuments and extensor tendon. Mr. Adams, on the other hand, prefers subcutaneous section of the affected ligament, followed by the use of an extension-apparatus for some months after the operation. The paper was illustrated by a case showing the earliest stage of the complaint, before any deformity had appeared, by two casts lent by Mr. Adams and by dissections made by Mr. Shattock and Mr. Anderson.—*Brit. Med. Jour.*

WHY PHYSICIANS SHOULD MAKE CAREFUL NOTES OF THEIR CASES.—The *Boston Medical Surgical Journal* (June 16th, 1887) says editorially: "The advantages which accrue to the professional man from making accurate memoranda of his cases, are threefold: first, to himself, second, to his patient, third, to the medical confraternity generally.

The habit is one which is highly beneficial to the physician, leading him to greater accuracy in investigation and in diagnosis, and giving him a better command of all the details of the case. It cannot fail to be of benefit to the patient, for the latter will profit by the greater knowledge which his physician acquires of his malady, and the certainty that a case well understood is better treated. A physician who studiously makes notes, and keeps a careful account of his cases, will be more likely to communicate valuable practical experience to the medical profession, than one who is careless about preserving the important facts that continually come under his observation.

The amount of time requisite for writing such daily observations respecting each patient, as are necessary to give precision and continuity to the record of the case, is not considerable, especially if the record be made about the time of the visit; and a suitable memorandum book for the purpose may always be at hand. Many physicians waste in profitless loafing, hours of leisure which might better be spent in reading up their cases, or in doing something to add to the general stock of knowledge of the profession. Some with mental powers and educational attainments of a high order, get into a careless, slip-shot, and hap-hazard way of diagnosis: devote no time to writing up their cases, and too little time to watching and mastering the symptoms; and suddenly, some morning, awake to a realization, that the supposed case of ephemera was a bad form of typhoid, that the disease diagnosticated as pneumonia was pleurisy with effusion, that the simple attack of colic was one of peritonitis, and the trifling case of angina, one of malignant scarlatina.

How much valuable experience is lost to the world because physicians under whose observation come hosts of rich and varied facts (and under this cate-

gory we must include great numbers of country practitioners), failing to record, communicate, or even definitely to remember what they have witnessed, is, of course, an unknown, but immeasurably vast quantity.

No better example can be appealed to of what can be accomplished by the kind of industry which we have above recommended, than that of the late Dr. Austin Flint, whose whole life was devoted to the perfection of his own powers, the promotion of the highest welfare of his patients, and (as an ulterior but by no means secondary end), the improvement of the profession of which he was a member. The twelve large manuscript volumes of record of cases which he has left, without which his numerous treatises on medicine, now become classical, could never have been written, attest his indefatigable care, diligence and painstaking, all of which, it is true, were supplemented by an almost invariable physical health and vigor.

Many physicians complain of their want of time to accomplish anything outside of their ordinary daily routine of drudgery, but it is a significant fact that those men who have had the least leisure, have done the most good work of the kind to which we have alluded. We refer to the recognized leaders, whose professional duties have always been most arduous and exhausting—the Jacksons, the Brodies, the Watsons, the Trousseaus, the Charcots, the Flints, of medical literature—who have found time amid their pressing labors to record facts of personal observation and experimentation, and compose those works which have been, in an eminet degree, helpful to the present generation of medical men, and will never cease to have an influence on professional opinion and practice."

Catheterization of the Bronchial Tubes.—In the case of a patient who had every symptom of a bronchial stenosis, it was impossible to say whether the constriction was owing to some external obstruction pressing down upon it, or to some new formation in the wall of the bronchus itself. In order to get at the seat of the trouble, Prof. Landgraf made use of an ordinary English catheter which he inserted through the glottis into the trachea, after having painted the parts with a 10 per cent. solution of cocaine, in order to anæsthetize them. He succeeded in introducing the catheter 28.5 cm., counting from the incisor teeth, without meeting with any obstruction. This was the exact point of bifurcation of the bronchi, as after the death of the patient, the parts were measured, and found to correspond exactly. As the constriction was known to be on the left side a number of subsequent attempts were made without causing the patient any inconvenience whatsoever, until at last they succeeded in introducing the catheter 32 cm. where the constriction could be felt. After the patient's death an aneurism of the descending aorta was found to press upon the left bronchial tube. In this case the catheterization could only have acted palliatively, but in other cases of stenosis, such as is due to syphilitic processes, one could not only afford relief, but locally treat the patient. Moreover, the operation, with the aid of cocaine, is a comparatively simple one.— *Weekly Med. Rev.*

Poisoning by Chlorate of Potash.—Dr. Willie, of Halle, lately observed a case of poisoning by chlorate of potassium. The patient had taken 50 grammes of the drug daily for a month. The following were the symptoms: vomiting, profuse diarrhœa, dyspnœa, weak action of the heart, and cyanosis. The color of the blood became like chocolate. In the milder cases of poisoning by chlorate of potassium, gastro-intestinal phenomena are exhibited, with vomiting and congestion of the liver and spleen. Abdominal pains are complained of, and there is loss of appetite. The urine is diminished in quantity, and contains albumen; delirium, coma, tonic and clonic spasms, and unconsciousness sometimes supervene. Death occasionally takes place when the patient's condition appears to be improving.—*Brit. Med. Jour.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JULY 2, 1887.

Editorial.

MANIPULATION OF THE KIDNEY AS A MEANS OF DISLODGING RENAL CALCULUS.—An ingenious method of dislodging an impacted calculus in the kidney has been reported in the *London Lancet*, (May 21st, 1887) by Dr. W. H. Bennett, of London, which seems worthy of trial before more serious operative methods are resorted to. The patient, a woman, was quite thin and the kidney could be felt through the abdominal parietes. Manipulation of the organ was proposed with the view of bringing about the passage of the calculus down the ureter. To insure complete relaxation the administration of an anæsthetic was proposed but was rejected by the patient. The patient was then laid upon a couch, the fingers of the operator's left hand were dipped deeply into the abdominal wall over the kidney whilst his right hand was pressed forward into the loin. The kidney was easily felt between the two hands and was needed as thoroughly as circumstances would admit. The manipulation caused much acking and tenderness, but the patient was well enough to walk away afterwards. Two days subsequent to the manipulation the patient reported that she had suffered much discomfort for the rest of the day after the manipulation and that she was seized as she was going to bed with a most acute pain in the affected loin and side of the abdomen. The pain lasted for about half an hour, during which she vomited twice. All at once an uncontrollable desire to micturate occurred, and the pain immediately disappeared. No further pain followed. Dr. Bennett is of the opinion that a small calculus was dislodged and made its way down the ureter, although no evidence of its having passed *per urethram* was forthcoming.

He suggests that manipulation without incision will prove of utility in certain cases of renal calculus not too far advanced, and offers the above case as corroborative of this opinion.

Dr. Bennett was fortunate in finding a case with such lax abdominal walls as would admit of manipulative efforts, and it is probable that the method practiced in this case was of value although the result lacks that positiveness which is desirable. The method is, at anyrate, entitled to consideration, and it may prove a valuable adjunct to the medical treatment of renal calculus.

A NEW METHOD OF TREATING LOCALIZED TUBERCULOUS PROCESSES.—Dr. Gustav Kolischer, of Vienna, operateur at Professor Albert's clinic, presents a method of treating local tuberculous affections in the *Wein Med. Presse*, of May 29, 1887, and claims for it, phenomenally successful results. Having noticed the unsatisfactory results, obtained, by other methods of treatment, it occurred to him that it might be possible to produce artificially a calcification of the caseating masses, such as sometimes occurs spontaneously in the lungs and elsewhere. After a series of experiments he hit upon an agent which would produce sufficient irritation to alter the tuberculous processes, and eventually to produce their calcification. He was led to this by noticing that when inflammation occurs in a fungous joint it often leads to a shrinking up of the granulations, and by contraction to their final disappearance with restoration of the functions of the joint. He sought to effect this with a solution of the acid phosphate of lime, which was injected into the tuberculous mass or joint, and

as has been stated with most encouraging results. The method was employed in numerous cases of fungous joints, cold abscesses, fistulæ and other tuberculous conditions, and several patients were presented cured at the meeting of the K. K. Gesellschaft für Aerzte on May 20, 1887. Two distinct classes of cases were noticed, which differed in regard to their behavior under treatment. In one the injection of the acid phosphate solution was followed by rapid recovery after a short stage of reaction. The first effect of the injection was an inflammatory reaction lasting from four to seven days, then in from two to four weeks hardening of the mass occurred which, however, was not permanent, but gradually shrank and disappeared, leaving the joints in a normal condition. In the second class, the processes were further advanced and the caseation progressive. In these about a week after the injection there was ulceration and the discharge of large quantities of tuberculous granulations, leaving cavities which filled up rapidly, and cicatrized firmly and quickly. He claims for the treatment that it relieves pain, subdues fever, and puts an end to the tuberculous processes, leaving the joints in good functional condition, without the formation of sinuses or the occurrence of prolonged suppuration. All new therapeutic discoveries ought to be received with a judicious scepticism until their merits have been proven by careful observation, but if half of that which Dr. Kolischer claims, proves to be true, we have a very valuable addition to our resources in this widespread class of cases. At least let the treatment have a fair trial.

Buck Taylor's Mishap.—Our valued contemporary, *The British Medical Journal*, is nothing if not entertaining and instructive. Rarely does it fail to detect a useful fact in the daily occurrences of the great life of London or to discover some point of medical or surgical interest in those accidents which chiefly interest mankind at large by the novelty of their occurrence or the importance of the subject involved.

All Americans by this time are familiar with the feats and adventures of the celebrated cowboy, Buck Taylor, one of the chief characters in Buffalo Bill's "Wild West." Buffalo Bill is now convulsing London society with his representations of the "Wild West." During a recent performance Buck Taylor sustained an injury which has not only made him the hero of the hour —"the daily receiver of a large number of visitors, including many persons of high social position and culture, who take an interest in an unsophisticated child of nature"—but which, as our contemporary says, "is not without surgical interest." Whilst engaged in the quadrille on horseback and passing between two horses, one of the horses swerved and left little space for his horse to pass on. Buck Taylor attempted to go forward but the swerving horse swung itself with great force against his right thigh. Buck Taylor felt the bone snap as he received the blow and he then tried to rest the injured limb along the back of the horse but found at once that he had lost all control over the muscles of the thigh. He threw his arms around the horse's neck and looked out for the right moment to slip off as comfortably as possible on the tan. As he fell he sprained the muscles of his neck. A simple and perfectly transverse fracture of the right thigh-bone was sustained at the junction of the upper with the middle third of the shaft. Owing to the direct violence the shortening will probably not amount to half an inch. "The chief point of interest," adds our contemporary, "however, in this case, is the production of the facture by direct force applied to the outer aspect of the thigh, not apparently in high degree, and without injury to the soft parts." Buck Taylor's limb now lies placed in a long splint, with extension by a weight and pully, and a kettle-holder splint is fitted to the anterior aspect of the thigh. Ere long this "unsophisticated child of nature" will be permitted to resume his occupation as a cowboy in the "Wild West" with a perfectly useful limb. All patriotic American citizens will congratulate Buck Taylor upon his royal

treatment at the hands of the English surgeons and upon the distinguished consideration shown him by the high social people of London. We venture to suggest, however, that this American cowboy is not such an "unsophisticated child of nature" as some of his numerous English hero-worshipers would make believe.

Miscellany.

A New Method of Producing Local Anæsthesia of the Skin.—Dr. Henry J. Reynolds, of Chicago, read a paper on the above subject at the recent meeting of the American Medical Association. Knowing that solutions of cocaine are not readily absorbed by the skin, and therefore produce no anæsthetic effect Dr. Wagner, of Vienna, about a year ago made experiments, the results of which he afterwards presented to the Society of Physicians of Vienna in the form of a paper on that subject, with a view to abtaining a more successful method of producing anæsthesia of the skin with this drug. He found that by saturating the positive electrode of a battery with a solution of cocaine, applying it to the skin, and then applying the negative electrode a short distance from the positive, with a moderate current, successful anæsthesia could be produced.

After considerable experimentation, I now use an eighteen cell McIntosh battery, but I think in some cases even a stronger current is necessary. For reasons not necessary to discuss at present, the Faradic current will not answer. The strength of the current must vary with the sensitiveness of the part, the size of the electrode, etc. It is always necessary to use the strongest current that can be borne, which may vary all the way from four to five cells to twenty-four, but for which no rule can be laid down, the only guide being the feelings of the patient and the experience and discretion of the physician. Where the skin is very dense, and the part not sensitive to electricity, the electrode must be large, owing to the greater surface necessary to be acted upon. This renders the current more diffused, and hence in a sense not so strong; the current must therefore be very strong, requiring perhaps eighteen cells. The sponge on the electrode used for the solution should be of the finest and softest quality. When a strong current is used the irritation at the negative pole may be avoided by using a larger electrode.

In my experience the cocaine should be used weaker than a five per cent. solution. It may vary, however, owing to circumstances, from two to a twenty per cent. strength. Where the skin is thin, and the part will tolerate a strong current, a two to five per cent. solution will answer. On the other hand, if the part be so sensitive that only a weak current can be employed, as in the portions of the face, the solution to be effectual must not be less than ten per cent.

Saturate the positive electrode with the solution, and place it directly upon the part to be anæsthetized. Place the negative electrode, well saturated with water, on some point near by. A more remote point, as the hand on the opposite side, for instance, will answer, but it will take longer time and a stronger solution to get the effect than when placed near by. In working about the face, I think it is better to hold the negative electrode in the hand than to apply it to the face near the positive, as in this way a stronger current will be better tolerated.

It is well for the operator to familiarize himself with the method by experiments upon his own person. The electrodes should be kept firmly pressed to the skin, the positive being now and then moistened with more solution, as required, and the negative with more water. If the negative produce much irritation, it may be occasionally shifted to another place.

The time required to produce anæsthesia depends of course upon the location, the strength of the solution, the stregnth of the current, etc. In the skin of the flexor surface of the forearm, if the negative pole be applied near by, a

five per cent. solution with about ten cells, will produce profound anæsthesia in five minutes. If the negative pole be placed in the hand of the opposite side, about double that time will be required. Wherever the skin is dense, a longer time, stronger solution, and stronger current are necessary. In any case the current should be allowed to run as described till anæsthesia is produced, as ascertained by gently pricking now and then with some sharp instrument.

The duration of anæsthesia varies more or less also with the circumstances; as a rule, however, the effect is rather transitory, lasting perhaps from five to fifteen minutes.

In the operation for the removal of superfluous hairs from the face by electrolysis, I have frequently used it. In this operation, inasmuch as the tissues still conduct the current, an ordinary electrical sensation is experienced by the patient, but the sharp, stinging, burning pain at the site of the needle, sometimes so acutely felt, is, when the method is judiciously employed, entirely done away with. In the removal of small warts, nævi, etc., from the face by the knife, it is even more satisfactory. One obstacle in the way of its successful employment in certain portions of the face is the extreme sensitiveness of the part, owing to which condition a sufficiently strong current to induce the necessary absorption of the drug cannot always be tolerated. In a case of felon of the palm, I made a very careful effort with a ten per cent. solution and sixteen cells to produce anæsthesia, previous to lancing. In this case the method, as I employed it, was not a success. Failure in this case was explicable for the following reasons: First, the skin was thick and callous; second, owing to the extreme soreness sufficient pressure with the electrode could not be made to get the full benefit of the current; third, I think under the circumstances the current was not nearly so strong as it should have been. In dental surgery I think the method can also be used to advantage. I applied it in one case for Dr. W. H. Gale, of this city; the patient was a lady from whom two teeth were extracted. It is, of course, impossible to determine in such a case exactly how much benefit is derived from the procedure, but as nearly as could be ascertained, the pain in this case from the extraction was comparatively insignificant. Ten cells were used with a ten per cent. solution.—*Med. and Surg. Reporter.*

Anæsthesia in Heart Disease.—A special meeting of the Philadelphia County Medical Society was held on June 15th to receive the report of a committee appointed, at the request of Dr. H. F. Formad, to inquire into certain testimony given by him at a coroner's inquest; which testimony, he stated, had been imperfectly reported, giving rise to a false impression in the public mind. The opinion attributed to Dr. Formad was "that ether should not be administered to persons suffering with heart disease." It is true that he did so state, but the important omission of the words additionally used by him "without due precaution and proper care both during the administration of the drug and after its withdrawal," materially altered the import of his testimony as reported.

That Dr. Formad qualified his testimony by the use of the language quoted, was substantiated by the statement of the Coroner and the evidence of the records at the Coroner's office.

In view of these facts the Committee reported the following resolutions, which were unanimously adopted:

Resolved, That in the opinion of the Philadelphia County Medical Society, the testimony of the Coroner's physician, Dr. H. F. Formad, "that ether should not be administered to patients with heart disease, without due precaution and proper care both during the admistration of the drug and after its withdrawal" is correct and proper; and the same caution should be observed in any other case.

And whereas, A false impression may have been given to the public by the imperfect reports of Dr. Formad's testimony published in the daily papers, and the medical profession placed in a false and dangerous position, therefore be it further

Resolved, That, in the opinion of this Society, the administration of ether is not only necessary and proper when pain is to be inflicted upon patients with cardiac lesions, but lessens the dangers incident to operation: provided that due care be taken during the administration of the anæsthetic, and proper regard be paid to its after-effects.—*Med. News.*

Traumatic Displacement of the Penis.—Dr. Wagner, of Leipzig, has recently described, in the *Münchener Med. Wochenschrift*, a remarkable case which he had seen in 1883, in Professor Thiersch's wards. A child, aged about 5, had his prepuce accidently torn off. The penis retracted under the scrotal integuments, and it appears that the surgeon who first attended the case did not recognise this condition, probably believing that the penis had been torn away with the prepuce. For twelve years the patient continued to pass urine through a fistulous depression above the scrotum. Professor Thiersch then performed a plastic operation, having discovered the position of the penis. He cut down on the incarcerated organ, separated adhesions, and adjusted the integuments around the glans. The result was perfectly satisfactory, and the penis was completely restored to its functions.—*Brit. Med. Jour.*

Antipyrin.—M. Germain Sée has lately reported some cases in which he had observed the anæsthetic action of antipyrin. In cases of subacute rheumatism or hydrarthrosis, in which salicylate of soda, and even the actual cautery, had failed, antipyrin dispelled the pain and stiffness in a few days. Similar results were obtained in acute gout. This effect of antipyrin is more especially visible in such cases as facial neuralgia, obstinate headache, neuritis, lumbago, and other muscular pains. It also relieves the acute pain associated with locomotor ataxy and with certain forms of heart disease. M. Sée gave three to six grammes a day, in a watery solution, each spoonful of which contained one gramme. The drug does not affect the action of the heart or circulation. Subcutaneous injections of two grammes of antipyrin in a dog weighing ten kilogrammes caused decided diminution of sensibility in the limb in which the injection was made; it seemed to act directly upon the muscular nerves. —*British Medical Journal*, May 28, 1887.

Parthenine.—The *Journal de Médecine* publishes the following note on parthenine. Parthenine is an alkaloid (or rather a resinoid extract) obtained from the *Parthenium histerophorum*, a plant which grows in Cuba, in the Antilles, Patagonia, etc., and has long been employed as a febrifuge by the natives of Cuba. The *Parthenium histerophorum* contains, besides parthenine, four other inert alkaloids, and parthenic acid, which crystalises. Parthenine has a bitter taste. In doses of 1 to 20 centigrammes it increases the digestive power of the stomach; in doses of 2½ grammes it slightly lowers the temperature. It has no influence on the urinary secretion. Experiments made with this substance prove its value as a febrifuge and as a remedy for neuralgia.—*Brit. Med. Jour.*

Infantile Diarrhœa.—Hayem has found that the green color of the discharges from the bowels of infants suffering with entero-colitis is caused by a microbe which secretes this green coloring-material. The disease is epidemic and contagious. The best manner of treating it is to give to the child a dessertspoonful of a two-per-cent. solution of lactic acid after each time of nursing.—*La France Médicale.—Med. Times.*

The Use of Opium in Country Towns. —Dr. Henry Boynton, of Woodstock, Vt., in a recent address on alcohol and opium, said that the use of opium was increasing in that localtity. The four druggists report sales of opium in a year sufficient to make one hundred gallons of laudanum. This is the equivalent of one hundred and sixty-seven ounces of morphine. Of this amount only *five per cent.* is sold to physicians.—*Med. Rec.*

Medical Items.

The University of North Carolina has recently conferred the degree of LL.D. on Dr. Hunter McGuire, of Richmond, Va.

Dr. Seneca D. Powell, has been elected Professor of Clinical Surgery in the New York Post-graduate Medical School and Hospital.

Dr. C. B. Porter has been appointed Professor of Clinical Surgery in Harvard Medical College and Dr. J. Collins Warren Associate Professor to the same chair.

The largest dose of quinine ever given according to Dr. C. E. F. Knight, of Dublin, was administered by himself in 1883, and was 131.25 grains in twenty-four hours.

Raw mutton can be safely eaten, according to M. Chatin, of Paris, since it never contains parasites, at least in dangerous amount. It is a safer raw food, therefore, than beef or pork.

Iodol has proven entirely worthless, and no one may now be found willing to use it. Iodoform, on the countrary, has taken a fresh hold upon the confidence of surgeons.—*Progress.*

Chicago has no ambulances, according to the *Chicago Mail*, and recently a gentleman, taken suddenly ill, was taken home in an undertaker's coach that being the best substitute for an ambulance at hand.—*Med. Rec.*

A recent estimate shows that about one-fourth of the population of New York, Boston and London receive free treatment at the medical clinics; in Philadelphia one-fifth, and in Liverpool over one-half the population.

A new medical journal is to be published shortly in Paris, under Professor Grancher's direction. It will be called the *Univers Médical*, and the editor proposes to devote a much larger to foreign news than is usually given in French papers.

The Alumni Association of the College of Physicians and Surgeons of New York offer a prize of five hundred dollars, open for competition to the Alumni of the school, for the best essay upon any medical subject which may be submitted to the committee.

Dr. R. J. Levis, of Philadelphia, a well-known and distinguished surgeon, has announced his retirement from active professional work. A number of Dr. Levis' professional friends gave a reception in his honor at the Hotel Bellevue, Philadelphia, June 23rd, 1887.

An elaborate system of experiments has established the fact that no milk below 1029 specific gravity can come from cows in a state of health. Any milk which falls below this standard is either diluted or unhealthy, or is the product of cows in an advanced state of pregnancy, in which condition the milk is unfit for human consumption.—*Ex.*

The average weekly circulation of the *British Medical Journal* has now risen to 14,000, a number which is not only enormously in excess of that of any other medical journal in the country, but will be found on investigation to be considerably in excess of the combined circulation of the whole of the other medical journals in Great Britain.—*British Medical Journal.*

The American Orthopædic Association, recently organized, held its first annual meeting in New York City on June 15th and 16th, Dr. V. P. Gibney, of New York, acting as temporary chairman. The attendance was good and a number of papers were read. The following officers were elected for the ensuing year: President, Dr. N. M. Shaffer, of New York, Vice-Presidents, Drs. A. Sydney Roberts, of Philadelphia, and E. H. Bradford of Boston; Secretary and Treasurer, Dr. L. H. Sayre of New York.

The following is related by the *Medical Record*. Dr. W. J. Cruikshank recovered a $1,600 verdict, in his suit for $50,000 damages, against William Gordon, the trial for which was brought in the Supreme Court in Brooklyn, N. Y. The doctor asserted that Mr. Gordon went to the mother of a child he was attending, and urged her to secure another physician without delay, as, in his opinion, Dr. Cruikshank had not the skill necessary to attend a sick dog. There are few physicians who do not suffer at times from the class of meddlers to whom Gordon belongs. If a few more of these people were held to account there would be less interference with the work of the physician.

Dr. Pécholier recently communicated to the Académie de Médecine the results of his treatment of typhoid fever with quinine and lukewarm baths. He used this method with success in sixty-five cases. According to Dr. Pécholier, the treatment is not only curative, but abortive; it shortens the duration of the illness. M. Dujardin-Beaumetz, having been commissioned by the Académie to report upon the method, said it erred in being too systematic. Typhoid fever should be treated in different ways, according to the great variety of complications that may occur in the course of the disease. Cold baths, calomel and large doses of carbolic acid had been prescribed as certain remedies; but all these were attended with certain risks. M. Pécholier's treatment was employed at the first appearance of febrile symptoms. It could not, therefore, be considered certain that the sixty-five cases said to have been cured were cases of genuine typhoid fever.—*Brit. Med. Jour.*

Original Articles.

THE RELATION OF PYOSALPINX TO PUERPERAL FEVER.*

BY J. M. BALDY, M.D., OF PHILADELPHIA.

Until within a few years the term "Puerperal Fever" has been applied to certain conditions of the parturient woman without conveying any definite idea as to the exact pathological lesion involved. As in microscopy we designate everything that we are unable to recognize by the general term "molecular débris," so in the parturient woman we have been in the habit of applying the meaningless term "Puerperal Fever" to a set of symptoms, the origin and source of which we knew not. As usual in such a condition of ignorance, an innumerable number of theories sprang up on the subject—the most widely accepted of which was probably that advocated by Fordyce Barker, viz., that it is a specific febrile disease.

Thanks to the zeal of bacteriologists, we have now conquered our ignorance and can state without hesitation or fear of successful contradiction that the disease under discussion is of undoubted septic origin. We are therefore justified in dropping the ambiguous term of the darker ages and applying terms more in accordance with our advanced knowledge of the pathological lesion. I have no intention of entering into an exhaustive discussion of all the phases of puerperal septicæmia, but shall briefly try to add something to our knowledge of the particular subdivision which, for want of a better name, I shall call puerperal pyosalpinx.

The belief that a certain portion of our so-called puerperal fever cases are simply cases of salpingitis septica is by no means a new one, nor is it original with myself. Martin, in a recent investigation, has found the microörganisms of puerperal septicæmia in as many as seventy out of a series of two hundred and eighty-seven cases of inflammatory tubal trouble.

*Read before the Philadelphia County Medical Society June 22, 1887.

Schröder held that septic endometritis of the uterus did not extend to the tubes, *as a rule*; but he qualified this opinion by following it up closely with the remark that *occasionally* the endometritis did go on to a purulent salpingitis. Nor is Sänger silent on this subject, for he has only recently stated in a letter read before the Chicago Gynecological Society, in answer to one from Mr. Tait, "that salpingitis septica, coexisting with severe puerperal septicæmia has never as yet given the surgeon an opportunity to remove the principal focus of disease by extirpation of the tubes. It is possible, however, that under certain circumstances such a procedure might be indicated." Even before these words of Sänger's were in print the opportunity to remove the principal focus, and, I may say, in this case the only focus, of disease, *had* occurred and been taken advantage of by the surgeon, as witness the following case:

Mamie P., twenty-three years of age, was delivered of a male child after a tedious but normal labor, some four years ago. She was at that time confined to her bed for eight weeks with "an inflammation of the stomach." She, however, made a good recovery, and has never suffered from a pain or ache in her abdomen since—she has, in fact, considered herself a typically healthy woman. On February 3rd, I was called to attend her in her second labor. Although going with the messenger I found the labor over—a dead child together with the placenta, with all its membranes intact, lying between her thighs. Her bare arms, chest, and legs were exposed in a room without a fire. No examination was made, but she was put between warm, dry bedclothes as quickly as possible. On the second or third day she had a chill, with quick rise of pulse and temperature, a tympanitic and tender abdomen. These symptoms abated somewhat, and I lost sight of her for several weeks. On the third of March, just one month from the date of her confinement, I was again summoned to her and found that she had been suffering ever since I had last

seen her; she was at this time so emaciated that I hardly recognized her as my former patient. Her temperature was over 102, her pulse over 130; she was having continued chills and creeps, hectic, night sweats, and sleepless nights; her abdomen was swollen and tampanitic, and intensely painful; her bowels were loose and fetid; micturition and defecation were both painful—she was evidently fast approaching death. An examination of the soft parts showed no signs of a recent tear; the uterus was subinvoluted, and on the left side there was a large boggy mass, firmly adherent, tortuous, and extremely tender. The right side was tender, but no mass could be detected. Abdominal section was advised as the only remaining hope of saving life, and the proposition was eagerly accepted by both herself and friends.

Dr. Joseph Price saw the case with me and confirmed my opinion of immediate operation. I operated on the fifth of March (the delay being necessary in order to have her surroundings cleansed); Dr. Price, of Philadelphia, Dr. McMurtrie, of Danville, Ky., and Mr. Eckman, of Scranton, Pa., being present and assisting. The right tube and ovary were not removed. The left tube was found almost as large as the uterus and firmly adherent in all directions, especially to the bowel, from which it was separated with the utmost difficulty. An abscess of the cellular tissue was ruptured while breaking up the adhesions, and pus welled up through the abdominal incision. Both tube and ovary were removed. A large cheesy mass on the bowel at the point of adhesion was trimmed down with scissors and an application of Monsel's solution made to the bleeding points. After a free irrigation a drainage tube was put in and the incision, which was only one and a half inches in length, was closed with three deep silk sutures.

On examination the tube was found to be distended with pus; the ovary was broken down and contained pus. The patient rallied quickly from the ether and had no shock. Her pulse fell to 80 and her temperature to almost normal within twelve hours, and remained so until about the seventh day, when the drainage tube was removed. Up to this time she had done as well as possible under the circumstances. There had been little or no pain, no catheter used, bowels opened naturally; no drugs of any kind had been administered. The day after removal of the tube her pulse began to rise, as also did her temperature; pain developed in her left ovarian region, and she began to have hectic and cold creeps. About the eleventh day there was a free gush of pus from the tube tract and she began to improve again from that moment. A rubber tube was inserted and passed deep down into the pelvis and the abscess was washed out twice daily. The discharge gradually diminished and the tube was again removed. The wound is now completely healed and the patient is a well woman.

That these cases exist much more frequently than we have any idea is certain, and that oftentimes a life, otherwise doomed, can be saved by operative interference is but a natural conclusion. Mr. Tait mentions four deaths from this cause in Queen Charlotte's Hospital, as verified by post-mortem examinations, and says that "these cases during life were all regarded as puerperal fever." Sänger comes forward with two cases which have come to his knowledge in which the overdistended tubes burst and discharged pus into the abdominal cavity, with death on the fourth day after confinement in one case, and on the twenty-first day in the second case. Who can doubt that, in the light of our present surgical knowledge, if these cases had been recognized and operated on, the women would have all survived? The day has passed, I hope, in which we will allow a woman to die of pus in her abdomen without at least proposing an abdominal section, not merely as a last resort, but as an early means of relief and safety. It is by no means to be held that because a parturient woman has an inflammation of her tubes, she is to be rashly submitted to the knife of the surgeon. I have, within the past few months, seen a woman who pre-

sented an elevated temperature, with anorexia, restless nights, and other general symptoms, and whose tubes, on examination, I found enlarged and painful. Under careful treatment this local trouble all subsided, and with it the general symptoms disappeared and the patient made a satisfactory recovery. These mild cases, however, often go on to a chronic condition, when unrecognized and neglected, and the woman eventually falls into the surgeon's hands to be relieved of a pus-tube, and then generally gets the credit of having had a gonorrhœa at some period of her life, or some other disease puts an end to her suffering. The following case fairly illustrates this:

Maggie F., thirty-one years old, married thirteen years, has had one miscarriage and five children. Had always had good health until her last confinement, six or seven years ago. At this time she had a slow and tedious "get up." Her physician told her she had "an inflammation in her stomach." She was confined to bed for several months. She has never been well since that time; has been constantly losing flesh, suffered from pain, and has generally felt wretched, not able to work half the time. I was called to attend her on the 31st of March last, and found her suffering with peritonitis, of which she had been getting gradually worse for the past three or four weeks. An examination disclosed a pyosalpinx firmly bound down and extremely tender. I made an abdominal incision and removed a large and densely adherent tube and ovary, both filled with pus, from the right side. Recovery was uninterrupted, and she has been relieved not only from her peritonitis but from all her old sufferings. The last time I saw her she told me she was feeling more and more like herself, and was fast regaining her former weight.

The only regret I have in either of these cases is that I did not remove both appendages. The case Mamie P., has recently had an inflammatory attack in the remaining tube, from which she has recovered, but I am afraid the time will come when another operation will be required. I think where pus is found that both sides should be removed always, whether one side is apparently healthy or not, the patient being willing, of course.

Whether or not this disease arises *de novo*, or, having already existed from other causes, has simply a new inflammation added by the puerperal condition, must be determined by careful investigation in each case. Hecker, as early as 1878, mentions two cases in which an old pyosalpinx was lit up by the puerperal state, and Sänger adds another from his own practice in which the salpingitis had a prior existence. In the case of Mamie P., the patient was apparently perfectly well up to the time of her last confinement, but the adhesions were of such a firm character that it is safe to presume that there was an old inflammatory trouble prior to this time. At her first confinement she had "an inflammation in her stomach," and that was the probable beginning of her trouble. She undoubtedly has had tubal disease ever since (probably pyosalpinx) and has not suffered enough inconvenience from it to seek advice. This is often the history of these women; they complain of pain and general ill-health, loss of flesh, anorexia, and sleepless nights, etc., but oftentimes they do not even suspect the real origin of all their trouble. The result in the case of this particular patient is a valuable lesson of the dangers of such a neglect, and is an additional reason why the disease should always be removed when recognized.

Of course, the possible contagion of gonorrhœa can never be eliminated excepting by a microscopical examination. In both my cases, although the trouble seemed very clearly to have arisen at the time of confinement, yet the chances of gonorrhœal infection both before and after pregnancy are not to be denied; however, in lieu of a microscopical examination, the chances are all in favor of a purely puerperal origin. But whatever the source, the results are the same, and it is only by prompt measures we may hope to save some of these cases. It is no longer surprising that even under the most careful antiseptic treatment

of the uterus, vagina, and person of the patient as well as the person of the attendants that still patients are lost from septic poison. This disease has been recognized and operated on at least four times in Philadelphia; one case was operated on just two weeks previous to mine, by Dr. Longaker, in which a pyosalpinx was removed, the patient dying on the second day. I may state here that this operation was delayed three or four days after an abdominal section had been urged. Dr. Joseph Price has since operated twice, and in one case found more than a quart of pus in the abdominal cavity; the case, unfortunately, came into his hands too late and the patient survived only two days.

These cases, though few in number, certainly teach us that the work done in this direction is encouraging, and although a large percentage of the patients have died, it only warns us of the extreme importance of an early diagnosis and prompt surgical interference. It becomes our imperative duty in every case of post-puerperal trouble to make a thorough investigation on the appearance of the first symptoms, and should a fulness be found on either or both sides of the uterus, accompanied with pain on touch and with constitutional symptoms of gravity, there should be no hesitation as to the course to pursue. This being secured, our present high mortality of one woman out of every hundred delivered in large cities, as recently stated in a statistical paper on lying-in charities in the United States, must be very largely diminished and the fatal results now surrounding our parturient women must become infinitely less.

The Bureau of General Information, Washington, D. C.—Physicians and others who desire to obtain information and references from the library of the Surgeon-General's office, or from any other sources in Washington, will find it to their advantage to communicate with the Manager of this Bureau, Joseph B. Marvin, P. O. Lock Box 379, Washington, D. C.

Selected Article.

TWO CASES OF TUMOR OF THE BLADDER, RECENTLY REMOVED BY SUPRAPUBIC OPERATION: WITH REMARKS.*

BY SIR HENRY THOMPSON, F.R.C.S., M.B. LON.

Surgeon Extraordinary to H.M. the King of the Belgians: Consulting Surgeon to University College Hospital, etc.

These two cases so well illustrate certain conditions met with in papilloma of the bladder, that it may be useful to place them thus distinctly on record. Each was brought to me by my friend, Mr. O. C. Maurice, of Reading, who was present at both operations.

1. A gentleman, aged 62. April 22nd, 1887, I saw him for the first time. One year and a half ago, he first saw blood in his urine; he then passed a long interval without seeing any; lately a rather free bleeding has occurred every two or three weeks. Little or no undue frequency in micturition, and very little pain are experienced.

Examined rectum: no enlarged prostate, bladder soft and yielding; no marked feature to be noted. Sounded: nothing felt. I then washed out the bladder to obtain *débris*, and observing a single shred of filmy semi-gelatinous matter in the fluid, I put it under the microscope. It was a perfect specimen of papilloma; the central axis with its vessels, with columnar epithelium radiating therefrom around the extremity and on each side. Mr. Maurice saw it with me, and recognised its exact correspondence with the papillomatous type; hence we agreed that with such evidence there was no need for further inquiry, and advised operation without needless delay. The patient is very stout, his perineum, almost concealed between the nates, was inaccessible for any purpose of operation by that route. I advised, therefore, the suprapubic operation; great obesity adding less to the difficulty above the pubes than by the perineal route, where the task of re-

*From *Brit. Med. Journal.*

moving a tumor is more difficult and delicate, although it could not be large, judging from the brief history obtained.

May 6th. I performed the operation in the usual manner, my friend, Mr. Buckston Browne, assisting, and also Mr. Maurice. Partly by the knife and chiefly by the ivory separator, the bladder was speedily reached and opened. Up to this point there was no bleeding; I found a pedunculated growth, about the size of an ordinary strawberry, growing from the left side of the bladder, removed it with the fingernail chiefly, aided by a small metal scraper, as close to the surface of the bladder as possible. The upper three-fourths of the wound was closed by stout stitches; a tube placed in the lower third; and bleeding, which for a short period had been profuse, almost ceased. It proved to be a specimen of fibrous papilloma. The patient made an excellent recovery. At the end of about ten days he appeared to be unable to empty the bladder, and learned to use the catheter. Healing of the wound now proceeded rapidly; all urine ceased to pass by it on May 24th, and it remained closed until May 31st, when it slightly reappeared, and now (June 6th) seems healed.

2. The other, a man, 44 years of age, was operated on in September, 1886, first by digital exploration, which revealed a large growth; the history of symptoms had extended over four years, hence I did the suprapubic operation at once, and removed it in the manner above described. It is unnecessary to add more, as I exhibited the patient in less than a month afterwards at the Clinical Society; the wound soundly healed, and he was free from all symptoms.

I may add that he is at this present time actively engaged in his business and is free from all signs of the malady.

Remarks.—I have considered these two cases together because they are marked by points of interest in connection with the subject of vesical tumor. They illustrate, first, the remarkable difference which is met with in different cases of papilloma, in regard of facility in obtaining evidence of its presence in the bladder. I have on several occasions been able, as in the instance given in detail above, to demonstrate the presence of the growth at the first consultation with my colleague in the case. On the other hand, I have sometimes had to make a careful and prolonged examination of the urinary deposits, on as many as six different days, after washing out and otherwise disturbing the cavity expressly for the purpose, without being able to discover a trace of the tissue sought. This happened with the second patient, who nevertheless proved to be the subject of a large papillomatous tumor. I had no moral doubt that he was so, and advised digital examination under the circumstances; and being quite prepared for a suprapubic operation, performed it forthwith.

Secondly, the result, I think, shows the value of the perineal exploratory incision, while it in no way interferes with the high operation, which may be generally preferable to the perineal (*a*) when the tumor is large, or (*b*) placed disadvantageously for removal by the perineum, or (*c*) when the tumors are numerous and scattered, as occasionally, but not commonly, happens. In all these circumstances, with a growing appreciation of the high operation from the excellent results it has yielded me, I do not hesitate to resort to it by preference. On the other hand, when digital exploration reveals a single polypoid, accessible, and evidently amenable to the action of the forceps, no further operation is necessary. Several cases thus operated on have been living from one to six years since the operation without the slightest return of symptoms.

Thirdly, the history of papilloma is remarkably uniform in the order and progress of its chief incidents. First, a considerable hæmorrhage, without known cause, unaccompanied by pain or irritation of the bladder. It was doubtless the absence of those signs which occasioned such bleeding to be almost invariably regarded until lately as originating in the kidney. After an interval

of several months, or even a year, a second attack takes place; then recurring hæmorrhages, with gradually lessening intervals between, not much pain being experienced unless obstruction to micturition is occasioned by clots. Then unduly frequent micturition gradually appears, which subsequently might be painful, although by no means necessarily so to any great extent; and finally hæmorrhage becomes more or less copious and continuous, and forms the most prominent feature of the case. Carcinoma and sarcoma, on the other hand, do not usually produce considerable hæmorrhage until the disease has reached a somewhat advanced stage. A painless hæmorrhage is very rarely, if ever, the first sign. The bleeding is almost invariably preceded, and sometimes for a considerable time, by signs of obstruction, by pain, or irritation of the bladder. In this respect there is a marked contrast to the history of papillomatous growths. This statement of mine has been recently called in question, probably through some misapprehension of my meaning, which may not have been made sufficiently clear. Of its general accuracy, as above stated, my large experience of vesical tumors (I have operated for their removal forty-three times) leaves no room for doubt.

Lastly, relative to the final stage in the operative procedure, the question whether it is better or no to close the bladder of the adult by sutures may be regarded by some as to a certain extent undecided. I may remark that perhaps it has not been sufficiently observed that the muscular constituent of the bladder, by its natural contractile action, narrows the opening very considerably soon after the operation, to an extent perhaps scarcely realized. The only incision I make into the bladder in operating is the simple puncture of a scalpel by the side of the hook first applied to hold the wall secure; and the little opening readily dilates to admit the index finger, while gentle stretching easily extends it as much as may be necessary to remove a large calculus or deal with a tumor. Nevertheless, very soon afterwards, the opening little more than suffices to admit the silk flexible tube which I always place in the wound for the purpose of evacuating the bladder of its contents during two or three days after the operation. I have therefore never put a stitch into its walls, only two firmer ones to close the upper two-thirds of the wound carried deep through the parts of the abdomen, and I have never met with extravasation or suppuration in or about the line of incision or elsewhere.

If the wound appears to be slow in healing after fourteen or eighteen days have expired, and a good deal of urine is still passing through it, the patient should be taught to empty his bladder every three hours or so by catheter, as in other cases of urinary fistula indisposed to heal, and the result is usually successful, beginning sooner still if he was previously unable to empty his bladder by the natural efforts and was in the habit of using the instrument. Of this condition the first case was a good illustration; the wound healing rapidly when the urine was withdrawn habitually by catheter.

Society Reports.

BALTIMORE ACADEMY OF MEDICINE.

STATED MEETING HELD MAY 31, 1887.

PROLAPSE OF URETHRAL MUCOUS MEMBRANE.

Dr. H. P. C. Wilson remarked, in connection with Dr. Chisolm's case of prolapse of the urethral mucous membrane in the female, that since the last meeting one of his assistant had reminded him of a case of everted urethral mucous membrane which he had treated with the thermo-cautery. He passed the cautery into the urethral canal and destroyed the excess of mucous membrane. There was no complication and the case went on to complete recovery.

Dr. J. J. Chisolm thought such treatment would cause stricture of the urethra.

Dr. H. P. Wilson, said there was no danger of such an accident.

Dr. A. K. Bond, referring to the

PHENYLHYDROGEN TEST FOR SUGAR IN THE URINE,

said that through the kindness of Dr. F. Donaldson, Jr., he had obtained a specimen of that urine which had recently caused so much discussion in insurance circles. Dr. Donaldson had tested it with Fehling's test, on the same day on which he gave the specimen to Dr. Bond and stated he was sure that it still contained the substance named by Marshall, glycosuric acid (a provisional name only). The urine was of a dark amber color, clear containing little or no sediment. When Dr. Donaldson tested it with Fehling's test a few hours previous, he had obtained the precipitate of cuprous oxide exactly as if sugar had been present. The urine was slightly acid. When Dr. Bond added urine to the warm concentrated Fehling's fluid it turned an opaque chocolate brown and on standing until cool a red sediment was observed, the upper parts of the fluid being greenish brown. With diluted Fehling's fluid the urine turned slightly yellow and there was a trace of sediment. On adding a caustic potash solution (1 to 3) the urine turned red above and on addition of bismuth in the cold, and even after heating, there was no discoloration. There was nothing to be observed in the sediment. With the phenylhydrogen test he got the same result as if the urine had been normal. Even after letting the fluid stand twenty-four and forty-eight hours no sugar crystals could be seen. He thought the result rather strengthened than weakened this latter test.

Dr. Bombaugh asked what was the specific gravity of the specimen of urine obtained from Dr. Donaldson.

Dr. Bond had failed to take the specific gravity.

CATARACT EXTRACTION WITHOUT IRIDECTOMY.

Dr. J. J. Chisolm had been operating for cataract extraction without iridectomy; five cases had been treated in this manner and no eyes had been lost. Central pupil had been secured and very good vision. Yet in no case was the pupil absolutely free from adhesions, an indication that iritis was much more prone to occur when the iridectomy was omitted. This method of removing cataracts without iridectomy has a strong advocate in Dr. Panas, of Paris, and is now under trial in the United States. Dr. Chisolm thought that he would not continue it as the dangers of iritis were increased by the manipulation which the iris had to undergo in the lens extraction and also on account of the difficulty in leaving the pupil perfectly free of lens detritus.

Dr. Bond asked whether it was necessary to dilate the pupil preparatory to the extraction.

Dr. Chisolm said that the liberal use of cocaine always used in eye operations enlarged the pupil, but that with the escape of the aqueous secretion there was always shrinkage which necessitated expansion of the pupilary orifice by the escaping lens. Should the iris protrude from the corneal wound it could be either replaced in the anterior chamber or be excised.

A FISTULA FOLLOWING LABOR AT A LATE DATE.

Dr. W. P. Chunn was called out of town to see a women who had been unable to hold her urine for three weeks, at which time delivery had taken place. Forceps had been used and it was supposed that the bladder had been ruptured by the forceps. It was found upon inquiry that the incontinence had not come on for three weeks after labor which excluded forceps as a cause. The point of interest was that the fistula made its appearance at so late a date after labor. He thought it was important not to blame the obstetrician and the forceps when they are so often not the cause.

Dr. R. T. Wilson had a case sent to to him recently, a woman who passed water from the vagina three days

after childbirth. He found she had been in labor three days and three nights. Labor took place in June and the case was received by him in November. By the pressure of the child's head the vesico-vaginal and urethral septum sloughed away leaving a vesico-vaginal fistula which extended across the whole urethra. He closed it up successfully with a single operation.

AN ERUPTION FOLLOWING VACCINATION.

Dr. Bond had vaccinated the children in the Home ot the Friendless with virus obtained from Dr. Teackle. In eight to ten days the children began to have a rash, which, in one or two cases, looked like erysipelas. The eruption extended around to the ribs and from here a miliary eruption covered the whole body. It looked like measles. About two weeks later similar cases were observed in those children who had not been vaccinated. This erythema did not cover the head and neck in these children. Some were sick four to six days with fever which was not continued. He ascribed it to the drinking water and had heard of similar cases from other physicians.

VESICO-VAGINAL FISTULA NOT CAUSED BY FORCEPS.

Dr. H. P. C. Wilson remarked that he had not seen a case of vesico-vaginal fistula caused by forceps. If forceps were used more frequently we would not have so many cases of vesico-vaginal fistula. The tendency is to allow the child's head to remain too long before using the forceps. He had seen cases in which the slough came way from two to three weeks after childbirth. Forceps are often blamed when it is actually the want of forceps.

Dr. T. A. Ashby coincided with the views expressed by Dr. Wilson. He believed that the chief cause of vesico-vaginal fistula was an impacted head. In this way the maternal tissues were strangulated by mechanical pressure and necrosis with sloughing was almost sure to follow. The child's head should never be permitted to become impacted in the pelvis. When the head ceases to move with uterine contraction the forceps should be applied and delivery be accomplished. The forceps properly employed will prevent rather than cause vesico-vaginal fistula. This view has been expressed by Dr. Emmet, whose experience with these lesions is perhaps larger than any other gynæcologist in America. Dr. Emmet advocates prompt delivery the moment the head becomes immovable in the pelvis. An impaction of the head for two hours may be sufficient to cause a most extensive sloughing of the vaginal walls. Dr. Ashby said that in all cases of difficult or prolonged labor where the maternal tissues were bruised or injured hot water antiseptic douches should be freely used by way of prophylaxis. A commencing ulceration of the vaginal walls might be arrested and cicatrization effected thus preventing the formation of a fistula.

Dr. Robert T. Wilson remarked that in labor the perineum was more apt to be torn by the shoulder than by forceps when properly applied and used.

BERGEON'S METHOD.

Dr. Canfield reported improvement in a case of phthisis treated by Bergeon's apparatus as modified by Dr. Uhler. As it had been doubted that patients actually tasted the sulphuretted hydrogen and as the general opinion was that the patient was apt to imagine he tasted it, he would say that in his case the man was weak, apathetic and, above all, not over intelligent and had no idea what he was doing, and yet his daily complaint was that his food tasted of sulphur, and finally the treatment was abandoned because the patient could not eat with comfort and said he would rather die than undergo it longer. The improvement was marked for the time (one week).

Dr. Canfield then read a paper on

CYCLIC ALBUMINURIA.

After reviewing the literature of the subject, he called particular attention to

one case in which the urine was tested eight times daily. The patient was a student and under ordinary circumstances his urine was free from albumen on rising and very albuminous one hour later and also on retiring. One day he arose at 12 noon and the urine of the forenoon was free from the albumen, and one day he worked in the morning and went to bed at noon when the afternoon's urine was found free. One day he worked very hard and it was present all day. At several different times he remained in bed all day long and in these cases the urine was always free from albumen. At no time was the morning urine albuminous; at no time did the urine contain pathological sediment. At no time was the amount of albumen over 0.1 per cent., and the specific was always between 1005 and 1020 and always acid. This condition was observed for a year or longer with little change. Dr. Canfield also reported a case he had recently observed in which albumen had been present for 18 months to two years and yet there were no other evidences of nephritis. He quoted Dr. Munn of the United States Life Insurance Company of New York, who finding that nearly ten per cent. of all the deaths of policy holders in his company occurred from Bright's disease, made an examination of the urine of all applicants and followed up the rejected risks between 1877 and 1880 and found at the end of that period that four had died out of sixty-nine, and the general appearance of the majority of those who had been under observation for more than a year was gradually deteriorating, and for this reason he was inclined to regard albuminuria as of grave significance. Dr. Canfield mentioned the importance of examining the afternoon and morning urine as well as the night urine.

Dr. T. A. Ashby thought that many cases of cyclic albuminuria, as Dr. Canfield had stated, existed. He mentioned cases which he had reported at a previous meeting. After having one case under observation a long time and noticing no deteroriation in health he had recommended him for insurance and he was admitted. This patient was now enjoying good health.

Dr. Bombaugh asked if any of these cases mentioned by Dr. Ashby had proved fatal.

Dr. T. A. Ashby said they had not. All were enjoying excellent health.

Dr. Bombaugh reported a case of albuminuria in which the man was very persistent and also his friends in wishing to have him insured. Dr. Bombaugh refused and the man is to-day dying.

Dr. P. C. Williams thought that in case of doubt the applicant should not be recommended and that medical examiners often deserved blame.

Dr. T. A. Ashby thought if the examiner told the truth the company would decide whether to admit the applicant or not.

Dr. Bombaugh remarked that the companies usually took advantage of the doubt.

Dr. Canfield mentioned the sensitiveness of the nitric-magnesian test as introduced by Roberts. This solution (4 parts of a saturated solution of the sulphate of magnesia, filtered and to it one part of nitric acid c. p.) is much more sensitive and reliable than the nitric acid test.

Dr. Bond thought Dr. Canfield's article very interesting but he thought, that experiments made with the urine of a large number of soldiers was objectionable on account of the prevalence of gonorrhœa among such men and the presence of albumen with gonorrhœa.

Dr. Canfield said that in gonorrhœa we find a large amount of sediment and particularly pus corpuscles which are not observed in large numbers in cyclic albuminuria. He thought a careful use of the microscope would detect at once even if the naked eye failed to see the difference.

Dr. A. K. Bond then referred to certain abnormal conditions of the kidney as described by Ultzman and in which any disturbance in the circulation due to local cause, such as cicatrices, healed abscesses or to constitutional causes, would cause temporary albuminuria.

Dr. Canfield replied that we could imagine many conditions in which we would have albuminuria, but it rarely appeared in the cyclic manner as he described it and the cause of these uncer-

tain forms of albuminuria as well as of cyclic albuminuria was still doubtful, just as there may exist doubts as to the measure of normal urinary formation.

Dr. Robert T. Wilson then related a case of violent gastritis caused by the inhalation of chloroform. The patient had on one or two different occasions so suffered from an excruciating pain in the cardiac region that he had procured each time a large amount of chloroform, by buying a small quantity at many different druggist, and put himself entirely under the influence. He paid the penalty with this gastritis. Dr. Wilson having just seen the case within ten days had not yet decided whether a valvular growth existed or not. From the manner of seizure and the history, however, he suspected aortic trouble, for the paroxysms, are much like angina pectoris. Prompt relief was obtained from inhalation of nitrite of amyl administered in three minim glass capsules which were broken in the handkerchief and quickly inhaled. Dr. Wilson thought that every one in the habit of administering chloroform and ether should carry these capsules with him. He also suggested their use in cases of cocaine poisoning thereby relieving the cerebral anæmia.

Dr. Chunn asked whether the effect was on the circulation.

Dr. Robert T. Wilson replied that it had the well known effect of *nitrite of amyl* dilating the blood vessels in the face and neck and causing flushing of these parts and increased activity of the heart.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING HELD JUNE 22ND, 1887.

The President, H. AUGUSTUS WILSON, M.D., in the Chair.

Dr. B. F. Baer read a paper on

CYSTIC ENLARGEMENT OF THE VULVO-VAGINAL GLAND.

This case is specially interesting because of the size of the tumor, and of a mistaken diagnosis which had been made.

The patient, 36 years of age, married, but sterile, presented herself at the Polyclinic, and stated that she had "a rupture which would not go back," although she had been kept upon her back as long as two days at a time, and had been bandaged and compressed until she could no longer endure the suffering. Truss after truss had also been adjusted, but all to no purpose. On inquiry, it was learned that about a year before coming under observation, she noticed a small lump near the posterior commissure of the vulva, corresponding with the location of the vulvo-vaginal gland. It was painless, and gradually increased from below upward. At the time she presented herself it was as large as a duck's egg. During the first nine months of its presence it produced no symptoms, except slight inconvenience from the swelling, but about three months before coming under my notice the tumor began to occasion difficulty on account of its size, and the friction produced in walking, and from a most interesting symptom, namely obstruction to the flow of urine. During the act of micturition the urine would flow regularly for a short time, and then it would suddenly cease, to be followed by great pain. By an effort she could again start the flow, and then it would again abruptly stop. During the last few months, the tumor had so increased in size as to approach the symphysis pubis.

On examination, I found an elastic tumor making compression upon the urethra, and the mechanical interference was at once explained. When the bladder became full, the effort to empty the organ overcame the obstruction from pressure of the mass for a time, but as soon as the straining ceased the urethra would be again suddenly closed by the tumor. It required considerable force to displace the tumor so as to see the urethra. The tumor was not tender on pressure, and there was no signs of inflammatory action about it. There was marked fluctuation, and its size was not affected when the patient was in the recumbent position. The inguinal canal

was empty, and there was nothing in the shape or character of the tumor which would indicate that it contained intestine. The diagnosis lay between hernia and hydrocele of the labium majorum, both of which are exceedingly rare, and abscess or cystic enlargement of the vulvo-vaginal gland, although the tumor was much larger than any I had ever seen from the latter cause. I advised its removal by extirpation, because my previous experience in the treatment of this disease has taught me that radical measures are necessary. The patient entered the hospital, and in the presence of the Polyclinic class I proceeded to operate. An incision was made at the lower and inner surface of the tumor, my intention being to try to enucleate it entire. But the cyst was ruptured by the effort, and a yellowish fluid escaped of the consistency of thick cream, but without odor. I next passed my finger within the collapsed sac, and found that it occupied a very extended surface—from the upper portion of the labium down to the ischio-rectal space. The secreting surface or membrane was very thick. It was not likely, therefore, that anything short of removal of the gland would effect a permanent cure.

This has been my experience with these cases, as I have said. But hemorrhage is sometimes great, and this has caused most authors to advise simply evacuation of the fluid, and injection or packing with iodine, or some other agent, to destroy the surface. It will be remembered that the gland is in close relation with the transverse perineal artery below, and with the bulb of the vestibule at its upper extremity. When, however, the organ is diseased and hypertrophied, the bloodvessels become greatly enlarged, as during pregnancy, making this locality much more vascular. Then the gland, as the result of its increased size, extends much further up, and becomes surrounded by the network of veins called the bulb of the vestibule, and there is closer contact with the vessels at the lower surface of the gland.

In pursuance of my original plan, I endeavored to separate the sac from its close attachments with the handle of the scalpel; but this I was unable to do, and I was compelled to dissect it out with the edge of the knife. The extent of the surface was much greater than I had anticipated, even, and the hemorrhage very considerable; that from the arteries was controlled by ligation, but I found great difficulty in checking the venous. Hot water and compression failed, and I was finally compelled to pack the cavity with pledgets of cotton saturated with Monsell's iron, and supplement this with pressure supplied by vaginal tampon and with a compress held in position by means of a "T" bandage. The dressing was permitted to remain in position twenty-four hours (there being no untoward symptoms) when the bandage and compress were removed. I now ordered the constant application of lead-water and laudanum, which gave great comfort, as the parts were hot and somewhat swollen. Very little pain was complained of, however.

The next day a part of the packing was removed, and a little more each day after—as much as came away easily. Irrigation with carbolized water every four hours, and the constant application of the lead-water and laudanum, constituted the after-treatment. At the end of a week the last pledget of packing came away, and in another week the patient left the hospital, the wound having almost entirely healed. I was much gratified with the rapid recovery, for I feared that there might be extensive sloughing and granulation.

The operation occurred some months ago. The patient is entirely cured.

In simple retention cysts I have succeeded in curing the case by incision and packing. In abscess of this gland, treatment of that kind will usually be sufficient. One word in regard to the cause of these cysts. In the present case I do not know the cause. A common cause is injury from coition or from childbirth, the former most commonly. It sometimes occurs as a result of the first coition. There is no doubt that some of the cases have a gonorrhœal origin, but I do not believe that this cause is as common as is often stated.

DISCUSSION.

Dr. J. M. DaCosta said: I remember distinctly two or three cases seen within a few months. In one case a large quantity of fluid was removed. Another case was of chronic inflammation in the left labium- I opened it and treated it in the ordinary way, but it rapidly returned. I then thought of dissecting it out, but fearing just what Dr. Baer met with, tried another method of treatment, which has succeeded well in some cases. After emptying the cyst, I took a curette and scraped the inside; then, with a swab, applied a strong preparation of iodine, consisting of pure iodine with iodide of potassium dissolved in glycerine. I next took two or three deep sutures, bringing the walls in close contact, and in that way succeeded in obliterating the whole sac.

Dr. J. B. Deaver said: With regard to the causation of these tumors of the vulvo-vaginal gland, my experience is not in accord with that of Dr. Baer. I have not found injury a common cause. The majority of cases which I have seen have apparently arisen without any special cause. I cannot understand the difficulty experienced in the arrest of hemorrhage. I should simply pack the sac, and stitch the edges of the wound over it.

Dr. W. S. Stewart said: I have had some experience in operating on these cases. I do not use a general anæsthetic, but prefer to employ cocaine solution. I find that cocaine, in from a five to ten per cent. solution, has an astringent effect. In a cases in which I employed this in the removal of one of these glauds, I had expected hemorrhage, for the arteries in this location are numerous, and the veins valveless. During the removal of the gland I had no difficulty in controlling the bleeding by applications of the solution. After the operation, the use of sutures brought the surface accurately together, and there was no subsequent hemorrhage. In order to keep down inflammatory trouble, I made applications of phenol sodique.

Dr. Baer said: The arrest of hemorrhage would not seem to be a difficult matter where the gland is of normal size, but when the organ increases to a large size the vessels become much larger. If Dr. Deaver had seen the efforts which I made to check the hemorrhage by pressure, I think that he would have agreed with me that it was difficult to control. I had feared that I might have a granulating surface and some sloughing. The wound, however, healed nicely, and I have not had a better result under the best antiseptic precautions. Cocaine would not have arrested the bleeding, for the hemorrhage did not come from the incision, but from the vessels beneath the tumor.

Treatment of Grave Epistaxis.—According to the Paris correspondent of the London *Lancet* (April 30, 1887), M. Verneuil, who although one of the most eminent surgeons, makes frequent incursions into the domain of pure medicine, read a communication at the Academy of Medicine upon the treatment of certain forms of epistaxis by counter-irritation over the liver. M. Verneuil began by stating that he had at first thought that the method was entirely his own, but from bibliographical research it turned out that he had been anticipated to a certain extent by Galen, who says that large cupping-glasses applied to the hypochondria arrest nasal hemorrhage. In the first case related by M. Verneuil, the epistaxis was probably symptomatic of cirrhosis of the liver. Quinine, ergotine, and digitalis had all been tried in vain. The hemorrhage continued to recur at intervals. The second patient had suffered from nasal hemorrhage, which seemed to have been caused by the shock of a kick from a horse. In this case plugging had failed. The third was the subject of chronic nephritis with secondary affections of the heart and liver, and the cavity of the nose had been plugged without effect both with ergotine and perchloride of iron. M. Verneuil's treatment, which was immediately and permanently efficacious, consisted of the application over the region of the liver of a large blister.—*Ther. Gaz.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JULY 9, 1887.

Editorial.

THE BEHAVIOR OF BACTERIA IN THE DIGESTIVE TRACT.—When we consider the enormous number of living organisms of different kinds that are constantly gaining access to our respiratory and alimentary tract through the medium of the air we breathe and the food we eat, the question naturally suggests itself—What becomes of these organisms? Are they killed by the acid gastric juice? Does the bile really possess the antiseptic function usually attributed to it and are they, in consequence of contact with it, hindered in their growth? or is it the other fluids in the intestinal tract that play the rôle of protectors against the invasion of these mute bodies? or are they hindered in their growth *at all*, in their passage along the tract? It is to the solution of this problem that Macfadyn, of Edinburgh, undertook to determine the behavior of bacteria in the digestive tract. The result of his investigations appeared in *Journal of Anatomy and Physiology*, Vol. xxi. The conclusions which he considers himself justified in drawing, are of such manifold interest and importance that we shall proceed to present some of the more prominent, leaving out entirely any detail in regard to the technique of the work. To quote the author: "To-day, the digestive canal has been prominently brought forward as a source of infection, and an important rôle in general disease processes ascribed to it. The question remains to be answered. How is it that we take into the body so many germs without apparent injury? How is it that uncooked decomposing substances, such as cheese, can be eaten with impunity, while the intravenous injection of putrid substances causes death? Here we have the fact that the causes of disease act differently according to their point of entrance into the organism. Whence the failure of action when introduced into the digestive tract? The most general answer has hitherto been that—"In the normal secretions of the digestive canal, and especially in the gastric juice, we have agents of sufficient protective power."

It is not only very commonly supposed that the acid gastric juice has some antiseptic or germicidal action upon organisms that gain access to the stomach, but likewise is it, in most text books stated, that the *bile* possesses the function of an antiseptic for the intestinal canal. Up to the time of publication of the work to which we wish to call attention, the literature upon the subject hardly justifies us in considering this idea as based upon a foundation of truth. Without attempting to review the history of the subject, we will present some of the conclusions to which the author considers himself justified in arriving.

The reseach was divided into two natural groups. 1. Experiments made *outside* the body and 2. Those conducted *within* the body.

In the first series, the organisms were cultivated in media containing varying amounts of the natural constituents of the different juices along the tract, and the growth or failure to grow noted. The conclusions drawn are as follows:

Pepsin.—1. Pepsin alone does in no way hinder the development of germs, and still less kill them.

2. The hydrochloric acid is the active factor in the gastric juice, but its influence is not such as the tone of previous reseach would warrant us to expect.

3. These experiments, conducted outside the body, cannot lead us to conclude that the acid plays a serious barrier to

COLLEGE OF PHYSICIANS OF PHILADELPHIA

the passage of germs though the stomach to the intestine in a living state.

4. While it is true that several germs are very easily killed, representative pathogenic germs, such as typhoid bacilli, are very resistant.

5. The resistance of certain of the germs is against such a strength of acid that, *à priori* we might say they could pass through a stomach containing a normal proportion of Hcl without being killed and with much greater facility in states of lessened acidity.

6. The addition of pepsin, and the consequent peptonizing action on the mixture, does not aid nor retard the acid in its work, so as to make any perceptible alteration toward a lower or higher limit.

7. The quantity of pepsin added does not make any difference.

8. Spores are very resistant and as a matter of fact survive the action of gastric juice.

Bile.—1. The bile itself plays *no rôle*, either in alkaline or neutral reaction, as an antiseptic.

2. The bile salts have also no antiseptic power.

3. The bile acids are not antiseptics (as Maly and Emich have stated) of such power as to warrant the conclusion that they have a strong control over the phenomena of putrefaction. While the taurocholic acid is the potent factor, its effect is only moderate, and is exercised, not on the putrefactive, but on the more purely pathogenic germs.

The Organic Acids of the Chyme.—These organic acids have a potent effect in arresting development of putrefactive and pathogenic bacteria. Hitherto they are the most potent factors found, and can be assigned an important *rôle* in the digestive tract in arresting the development of the most varied forms of bacteria.

The Pancreatic Juice.—That this alkaline fluid has *no* antiseptic influence hardly requires to be stated.

Intestinal Ferments.—Sufficient opportunity was not afforded to draw a positive conclusion as to the action of these ferments upon bacteria, but a few preliminary experiment lead to the belief that these ferments are not without some slight influence in arresting the development of the organisms.

The series of experiments *without* the body then justify the following conclusions:

1. That gastric juice cannot be taken as affording any efficient protection against the entrance of bacteria into the digestive tract.

2. That the bile acids have a limited action, which with respect to putrefactive phenomena is weak.

3. That the action of intestinal ferments is doubtful.

4. That the organic acids of the food chyme are antiseptics, and have been found to be most potent factors in the digestive tract, having an action that is intense and versatile.

The experiments conducted upon living animals confirm in every way those performed *outside* the body, and justify one in saying that there is no special protection afforded us in the gastric juice. The germs once in the intestines find in the *organic acid of the foods* their chief and strongest foes.

The author conducted his experiments somewhat further and investigated the very interesting question: "Do germs pass through the normal intestinal wall?" "Do germs find their way from the intestinal canal into the organs and blood?" and he concludes that for such a migration to take place there should be some solution of continuity, for in the intact intestinal mucous membrane we have, beyond a doubt, an efficient germ filter.

From the above conclusions to which the author's experiments lead him to arrive, it is plain that but slender protection is afforded us by the juices of the alimentary tract, against the entrance into the canal of bacteria in a living state. But even though such an entrance is effected, it is not possible for them to make their way through the healthy mucous membrane into the blood and tissues. It is not the passage of the organisms themselves into the blood and tissues that gives rise to the symptoms common to diseases of bacteriological origin, but as later reseaches have shown

it is rather to the *absorption* of the ferments produced by these organs that we must look for the true cause of the malady, and it is highly probable that the majority of diseases of this class are true toxæmias, resulting from the absorption into the tissues of poisonous ptomaines, of whose true nature we as yet know but little.

Reviews, Books and Pamphlets.

Anæmia.—By F. P. Henry, M.D., Prof. of Clinical Medicine in the Philadelphia Polyclinic, Physician to the Philadelphia Hospital, etc. Reprinted from *The Polyclinic.* Philadelphia: P. Blakiston, Son & Co. Pp. 136.

This little monograph upon the very important and interesting subject of anæmia will be more or less familiar to readers of the journals, as it is in substance, a reprint which appeared in *The Polyclinic.* Dr. Henry's work in this field has met with appreciation both in this country and abroad, and we are glad to welcome the book, which gives us the result of his labors, in a permanent form. It is rather a matter of regret that the author did not set forth more fully the best method of examination of blood, since his book tends to stimulate research in this direction. After discussing the diagnosis and treatment of general anæmia, the different forms of the condition are taken up seriatim. A number of very interesting cases are given, and the potency of iron fully demonstrated. The section on treatment might have been somewhat fuller and more specific. The book will accomplish good in two ways; it will elucidate the particular subject of anæmia, certainly an important result, and it will direct attention to more careful study of the blood in various conditions.

The little volume is gotten up in a very attractive form by the publishers.

Outlines for the Management of Diet. By E. T. Bruen, M.D., Assistant Professor of Physical Diagnosis, University of Pennsylvania, Physician to the Philadelphia Hospital and University Hospital, etc. Philadelphia: J. B. Lippincott & Co. Pp. 138. Price $1.00.

Of the various practical manuals which have appeared in the last year, Dr. Bruen's is one of the very best. The author has steered most skillfully between the "strictly popular" and the "highly scientific." The book is one that can be read with interest and profit by physician, nurse, or any individual who has a desire to know what to eat and what to avoid. The entire management of the diet is too often left to the discretion of the patient or his friends and the preparation of the food too often depends upon the pleasure of the cook. The physiology of digestion is very clearly set forth in the first chapter, after which follows some general considerations in regard to the amount and character of the food to be employed at different periods of life.

One of the most suggestive and instructive chapters is that on the digestive and nutritive value of various solids and liquids, their mode of preparation and manner of administration. The latter half of the book is taken up with diet in special diseases.

Dr. Bruen has taken a subject usually treated in a very dull and unattractive manner, and made a most reliable little volume. We would commend it in the strongest terms, for we feel sure that no one, be he layman or physician, can fail to be both benefitted and entertained by its perusal,

Miscellany.

Commencement Day at the Western Pennsylvania Medical College, Pittsburgh, Pa.—With a banquet, provided by the Faculty, to the Graduates, at the Seventh Avenue Hotel, Pittsburgh, on March 24th, 1887, the Western Pennsylvania Medical College, concluded its first year. The spring course for 1887, attended by ten students, closed last week. The corps of Professors in the College numbers twenty-two, and an equal number of adjunct teachers and assistants. The number of graduates

for this year, is, oddly enough, also *twenty-two;* the enrollment being sixty; a large proportion of undergraduates have entered the junior class for the *three* years graded course provided by the college.

For the initial year, the success attained by the Western Pennsylvania Medical College is quite gratifying to the friends and patrons of the institution, and assures the future solidity and prosperity of the school.

The Trustees have erected a substantial and complete college building, the value of which is greatly enhanced by virtue of its location—immediately adjoining the Western Pennsylvania Hospital, one of the first importance, among the large general Hospitals of the United States. The winter term for '87 and '88, opens September 27th, and continues six months. For catalogue address Prof. W. J. Asdale, Secretary, Pittsburgh, Pa.

Pathogeny of Gastric Ulcer.—The precise pathogeny of chronic ulcer of the stomach is one of those undetermined questions which have led to considerable speculation, with comparatively little profit. The position, form, and nature of the ulcer have done more than any positive demonstration of the vascular lesion to favor the current doctrine of its dependence on arterial blocking. But every one knows the difficulties in the acceptance of this view, not the least being the comparative frequency of the disease in the female sex, and the great preponderance of cases where the ulcer is solitary and seated on the posterior surface near the lesser curvature. Dr. Decker, of Würzburg, has the last word on the subject (*Berl. Klin. Wochenshrift*, No. 21), and he advances evidence in support of the initial lesion being traumatic, or rather thermal. Thus, he believes that the contact of hot thickened fluids with the gastric mucosa excites hyperæmia, which becomes localized, and may lead to venous stasis and hemorrhage in a limited territory, with all the subsequent necrotic changes. He supports his view not only by reference to the clinical history of cases of gastric ulcer (he points to the great prevalence of gastric ulcer among cooks, who habitually test the flavor of their dishes when very hot), but by two experiments on dogs into whose stomach food heated to 50° C. was introduced. In one of the animals a patch of hyperæmia, with hemorrhage between the gastric mucosa and muscularis near the lower curvature, was found; in the other, a deep ulcer of characteristic shape and position had been produced. *The Lancet.*

The Illness of the Crown Prince.—We are able to state that the progress of the clinical features of the Crown Prince thus far confirms, in Dr. Mackenzie's opinion, the favorable deductions which may be made from the report of Professor Virchow which we have received by telegram from Berlin. The delay in the issue of this important document is due to the fact that precedent was opposed to its publication, and that only serious public considerations and some pressure in high quarters in Berlin have overcome this obstacle. The responsibility of the pathological statement rests with the eminent Berlin professor, than whom there is no higher authority. From the clinical point of view, Dr. Mackenzie is of opinion that the growth has not at all the aspect of malignancy. It has the granular, slightly cauliflower-like appearance of an ordinary papilloma, without any sign of infiltration of the surrounding tissues and at present there is scarcely even a trace of congestion around the base. There was, of course, a good deal of local swelling after the first operation, but in the interval between Dr. Mackenzie's two visits to Berlin, we understand that this completely subsided under the influence of rest and insufflations of astrigent powder. The growth occupies about the posterior fifth of the free edge of the left vocal cord, and the rest of the larynx is to all appearance quite healthy. The voice is all but entirely lost owing to the mechanical obstacle offered by the growth to the approximation of the cords. The Prince can just manage to make himself

heard by a great effort. He has never suffered from difficulty of breathing, but there was at one time a little trouble in swallowing, which has now disappeared. This was probably, however, unconnected with the disease. Everything seems at present to give grounds to hope for a favorable termination to this important case, the progress of which may be said to be watched with interest by the whole medical world. It will, of course, be self-evident that the full prognosis in such a case must alway be a matter of grave anxiety to the most experienced. During the stay of the Crown Prince of Germany in this country, he will be under the care of Dr. Morell Mackenzie, and Dr. Norris Wolfenden will act as resident medical attendant, to carry out the treatment directed by Dr. Mackenzie. Dr. Wegner, of Berlin, has accompanied the Prince as his personal medical attendant.—*Brit. Med. Jour.*

Action of Hyoscine on the Eye.—Dr. O. Walter, of Dorpat, has published a series of observations on the action of hyoscine on the eye. This body produces some toxic effects very similar to those produced by atropine,—viz., dryness of the throat and dilatation of the pupils; but, unlike atropine, it causes drowsiness and languor; it also sometimes causes nausea and giddiness. Until lately little has been known of the effects of hyoscine on the eye, but within the last few months two other Dorpat students, working under Professor Kobert's direction, have paid some attention to the subject—one of them, Dr. Sohrt, having published a paper on the general, therapeutic, and physiological effects of hyoscine. Hirschberg and Emmet had, however, remarked the mydriatic action of this subject. Dr. Walter experimented on animals by instilling hyoscine into one eye and atropine into the other, and found that a drop of an exceedingly attenuated solution produced distinct dilatation, acting both on the pupil and on the accommodation much more rapidly than atropine. The dilatation passed off more quickly than that produced by atropine. No decided effect was remarked on the intra-ocular pressure, but in patients with chronic glaucoma the regular application of hyoscine certainly produced an improvement in the sight and an enlargement of the field of vision. Slight toxic symptoms were produced by two drops of a one per cent. solution. The author recommends repeated applications of a weak solution in preference to a single application of a strong one. —*The Lancet*,

Antipyrin in Migraine.—Antipyrin is best known for its rapid action in the treatment of pyrexia, and it is commencing to acquire a reputation in the treatment of neuralgia. Dr. T. S. Robinson states in the *Medical Record* for May 7, 1887, that he has a record of eighty cases in which during the past two years antipyrin was used for the relief of migraine.

These cases are not selected. In fifty-four the drug acted favorably in from thirty minutes to two hours. In fifteen cases the pain was much abated, and when he resorted to chloral, bromides, or other drugs, he had to use smaller doses than the patient had otherwise been in the habit of using. The usual narcotic treatment of migraine is generally hurtful, the patient being too ready, on the slightest symptom of pain, to fly to his favorite drug, many times establishing a habit which is worse than the original. This objection cannot be applied to antipyrin, as it neither narcotizes nor stimulates our patients.

He recommends that patients who are subject to attacks of hemicrania should keep powders of antipyrin of 22 grains each constantly on hand, and that on the first symptom of the attack one powder should be taken in a little Vichy water, and repeated in two hours if the pain is not abated.—*Ther. Gaz.*

The Use of Fuming Inhalations in Asthma.—The relief which a well-arranged inhalation affords in the dyspnœa of bronchial asthma is indisputable.

Sir James Sawyer, in the *Birmingham Medical Review* for May, 1887, has prescribed the following fuming in-

halation for asthmatic patients with marked success:

℞ Potassii nitrat., ℥ss;
Pulv. anisi fruct., ℥ss;
Pulv. strammonii fol., ℥i. M.

A thimbleful of the powder placed on a plate is pinched into a conical shape and lit at the top; it burns with a smouldering flame like a pastille, and is held near the patient who inhales the smoke. The writer states that this method of treating the dyspnœa of bronchial asthma is very marked in its good results in a large proportion of cases. The remedy, however, is only palliative of the asthmatic paroxysms, but it is in these cases that we are often called upon to give prompt relief. For the reduction of the frequency and severity of the asthmatic attacks many other resources are of course favorable in the direction of dietetic, climatic, hygienic and medicinal therapeutics.—*Ther. Gaz.*

The Treatment of Diarrhœa in Infants.—Conby, of Paris, describes the symptomatology and etiology of this affection, stating that, in Paris, the mortality from this disease during the summer is 600 per month. He advises the use of dietetic measures, the subnitrate of bismuth, and laudanum. In the severer cases the writer recommends the following prescriptions:

1.—Aquæ destillat., ʒ 12½.
Syrup of quince, ʒ 5.
Acid hydrochloric, dil., ♏ 8.—M.
Sig. Teaspoonful every two hours.

2.—Sacch. pulver, ʒ 2½.
Naphthalin, gr. 15.
Iodoform, gr. 3.
Ol. bergamot, gtt. 2.—M.
Ft. in chart. 20 in num.
Sig. One powder every hour, in milk.

3.—Naphthalin, gr. 8.
Spirit. vini Gallici, ʒ 2½.
Syrup altheæ, ʒ 12½.—M.
Sig. To be taken during twenty-four hours, in teaspoonful or coffee spoonful doses.—*L'Abeille Médicale*, May 16, 1887.—*Med. News.*

The Physiological Action of Remisia Ferruginea.—At a recent meeting of the Biological Society, MM. Pinet and Duprat communicated a note on the physiological action of *Remisia ferruginea*. The forms employed in the experiments were an aqueous and a hydro-alcoholic extract of the root of the plant. Both extracts, as tested by litmus-paper, showed a decided acid reaction. The hydro-alcoholic extract was much less active than the aqueous extract. The experiments were made on frogs weighing thirty grammes, and the dose was the quantity contained in three divisions out of twenty in a Pravaz syringe. A quarter of an hour after the injection, in the foot of one of the hind legs, the animal was found to show general hyper-excitability, with considerable increase of respiratory movement and cardiac pulsation. In some of the animals the energy of ventricular contraction was so great as to produce asphyxia, that continued throughout the entire duration of the intoxication. The heart was found to be abnormally red. Electric contractibility of the muscles remained intact. Ligature of the iliac artery on one side, with injection of the extract into the opposite member, produced no difference in the effect. Section of the lumbar nerves on one side, with injection into the opposite member, caused the convulsions to appear only on the side where the in-nervation remained intact. When the spinal cord was divided below the medulla, no convulsive action took place. Ablation of the cerebral hemispheres in no way affected the phenomena above described. The authors conclude that *Remisia ferruginea* affects principally the medulla.—*The London Medical Record*, May 16, 1887.

The Value of Hæmorrhage in Treating Wounds.—Taruzza publishes a note (*Gazetta degli Ospitali*, April 13, 1887) to show that hæmorrhage from wounds, unless due to lesion of large vessels or in excess, does not interfere with primary union. He does not think it necessary to follow strictly the rule to secure complete arrest of hæmorrhage

and to apply firm compression. He relies on perfect disinfection of the bleeding surface, as far as possible, by means of weak solutions of carbolic acid or mercuric chloride. After this he leaves the cavity of the wound full of blood, the edges being accurately sutured, and without fear that primary union will not result. From his experience he formulates the rule: "In wounds perfectly disinfected and free from foreign substances effusion of blood is not a source of danger, but the reverse, as the effused blood fills the wound-cavity perfectly, preventing the formation of empty spaces, and making compression and drainage superfluous; and the organization of the clot favors union." He is opposed to the drainage tube, thinking that it increases risks of sepsis, and may remove from the wound fluids which, when aseptic, may be useful by reabsorption.—*Jour. Am. Med. Assn.*

THE DOCTOR MUST BE PAID.—A decision has recently been rendered in the suit of a New York physician against the executors of the estate of Alexander Sterling for services from July 1, 1882, to February 6, 1885, for which he claims $4,575, the value of 917 visits. The decision was in favor of the plaintiff. Sterling was a member of the Singer Sewing Machine Company, and when he died the income of his estate was $125,000. He bought a physician's diploma, at the age of 50. At his death he bequeathed to his daughter the sum of $200,000. The physician made nearly a thousand visits to the millionaire; but when he presented his bill he was informed that Mr. Sterling was a doctor, and according to the ethics of the profession, services of that sort were considered gratuitious. The suit followed, and the heiress will have to pay $4,575.—*Med. and Sur. Rep.*

THE INFLUENCE OF THE BERGEON TREATMENT ON THE INFECTIOUSNESS OF PHTHISIS.—At the recent *Congrès des délégués des sociétés savantes*, as we learn from our Paris correspondent, M. Lamallerée, after giving it as his opinion that the Bergeon method of treatment was inefficient in the cavernous stage of phthisis, although very useful in other stages, made the important statement that, whereas he had succeeded in communicating tuberculosis to chickens by making them swallow the sputa of phthisical patients, he had not been able to infect them when he used sputa from persons who were under the Bergeon treatment at the time.—*N. Y. Med. Jl.*

PAPINE.—Dr. Samuel E. Woody, Prof. of Chemistry and Public Hygiene and Lecturer on Diseases of Children, Kentucky School of Medicine, at Louisville, on April 8th, said:

Papine was used in a case of acute dysentery of unusual severity requiring unusually large doses of opium. The effects of Papine were so purely hypnotic and anodyne that a pound was ordered, and *no other form of opium was used during the entire illness.* Papine is a pharmaceutical triumph.

ANTISEPTIC FLUID USED IN THE PREPARATION OF GAUZE FOR THE AUSTRIAN ARMY.—The following formula is official in the preparation of dressings for the army:

℞.—Hydrarg. bichlorat.	1	part.
Spirit. vini	100	"
Aquæ destillat.	125	"
Glycerini	50	"
Fuchsin	$\frac{1}{100}$	"

The coloring matter is to render the material easy of recognition.—*Wiener medizinische Presse*, No. 7.—*Medical News.*

OLEUM CINEREUM.—Dr. E. Lang ("Wien. med. Wochenschr."; "Am. Jour. of Pharm.") uses this preparation as a topical application in certain syphilitic affections, also as an injection into enlarged glands, using 0·01 or 0·02 cc. once a week or once a fortnight. It is made by triturating mercury, oil, and lard together in a cool place until the mercury is uniformly suspended. The finished product contains 20 per cent. of mercury. When it is used as an injection, it is melted by the warmth of the hand. The proportion of oil to lard, also the kind of oil, are not stated.—*N. Y. Med. Jour.*

Medical Items.

Dr. Graily Hewitt has resigned the Chair of Obstetrics and Gynecology in University College, London.

Dr. Karl Pawlik, of Vienna, has been appointed Professor of Midwifery and Gynecology at Prague.

The New York Academy of Medicine is now the possessor of funds and property amounting to over one hundred and fifty thousand dollars.

Among other ways in which Edinburgh has decided to commemorate the Queen's Jubilee, is a hospital for consumption, at an estimated cost of £10,000.

Bowdoin College has recently conferred the degree of LL.D., on Dr. Fordyce Barker of New York. Dr. Barker graduated from the college in 1841.

Dr. George B. Fowler has been elected professor of clinical medicine and medical chemistry in the New York Post-graduate Medical School and Hospital.

Address to Queen Victoria.—The Council of the Harveian Society are preparing a loyal address from the Society for presentation to Her Majesty on the completion of the fiftieth year of her reign.

Dr. Edward H. Duggan, of Brooklyn, was shot and killed by a man named Weidler, on June 24th. Dr. Duggan was a physician in large practice, and a graduate of Long Island College Hospital, in 1861.

Dr. W. Allan Jamison and M. Alexander Edington, of Edinburgh, announce in the *British Medical Journal*, of June 11th, that they have discovered a specific bacillus of scarlet fever which they claim is the specific cause of this disease.

The Mississippi Valley Medical Association will meet at Crab Orchard Springs, Ky., on July 13th, 14th and 15th. The meeting promises to be very interesting and instructive as a large number of prominent men have promised to attend and to read papers.

Dr. Lewis B. Hunter, medical director on the retired list of the U. S. Navy, died in Philadelphia on June 24th, at the age of 83 years. Dr. Hunter was a native of New Jersey, and was appointed an assistant surgeon in the Navy in January 1828.

The British Medical Association will meet in Dublin on August 2nd, 3rd, 4th and 5th. The meeting promises to be one of the most successful the Association has ever known. The programme published in the *British Medical Journal* gives every indication that those who attend this meeting will be amply repaid for so doing.

Instances are occasionally coming under medical observation, of accidents from explosion of "syphon-soda" bottles. Whether the causualties are most frequently due to a defect in the quality of the glass, or to the water being too highly charged with carbonic acid gas, or to both conditions combined, is not known. But some very ugly little wounds have been caused in this way.—*Ex.*

King Otto, brother of the late King Ludwig, of Bavaria, has recently been pronounced insane. Princess Thyra, sister of the Princess of Wales, is confined to an asylum. One of the ladies of the royal house of Austria has recently become insane. *Per contra*, President Cleveland can stand a three weeks' course of black flies in the Adirondacks, and still preserve a condition of fine mental co-ordination.—*Med. Rec.*

Inebriate Women.—At a conference recently held at Liverpool under the auspices of the Reformatory and Refuge Union, Dr. Norman Kerr read a paper on "The Treatment of Female Inebriates," in which it was pointed out that while drunkenness was decreasing among men, it was increasing among women. He concluded by moving a resolution in favor of a permanent legislative measure for the compulsory protection of the diseased inebriate against herself.—*Brit. Med. Jour.*

The report of the Committee on Hydrophobia now only awaits the signature of the members. We are in a position to state that the report will contain experimental and other evidence accumulated by the Committee strongly supporting both the theoretical views of M. Pasteur and their practical application. We believe that Mr. Victor Horsley, F.R.S., the Secretary of the Commission, has succeeded in rendering several dogs absolutely refractory to the virus of rabies in any form.—*Brit. Med. Jour.*

Dr. Hofstetter, of Lucerne, has performed 17 thyroidectomies, with 14 recoveries, and 3 deaths. In the first 6 cases, the whole thyroid body was extirpated, and in the remaining 11, partial removal according to Kocher's method was practised. In the 3 fatal cases, death took place respectively five days, two months, and four weeks after the operation, two of the patients dying from carcinoma, and the other from gastric ulcer. In the cases of total extirpation, the wound healed on the average in twenty-four days; in those of partial removal in twenty-seven. In 3 cases the wound was dressed with iodoform and carbolised gauze; in 4 with oxide of zinc (according to Socin's method); in 9 with corrosive sublimate; and in 1 with pure water from a local aqueduct. As to the temperature after the operation, it never rose above 39.3° C., the average being 38.3° C. The wound healed by first intention in 7 cases. Cachexia strumipriva was observed in only 1 case.—*Brit. Med Jour.*

Original Articles.

ANTISEPSIS IN ABDOMINAL OPERATIONS; SYNOPSIS OF A SERIES OF BACTERIOLOGICAL STUDIES.*

BY CHRISTIAN FENGER, M.D., OF CHICAGO.

These investigations were undertaken to determine how far the necessary aseptic conditions had been secured and maintained in the abdominal sections performed by the author. One case of another operator is brought in to compare less thorough antiseptic precautions.

In order to estimate the results of these researches, you must know what preparations were made for the operation on the part of each concerned.

THE PREPARATION OF THE OPERATING ROOM.

In the Emergency Hospital and in the County Hospital, the walls and the floor and all the furniture were thoroughly washed with a 1-1000 sublimate solution on the day before the operation. The cracks about the windows and doors were stuffed with cotton, and the room closed to every one except the nurse that made the preparations.

To test the condition of the atmosphere in this room, in the Emergency Hospital, four plates of gelatin were exposed for 48 hours on the operating table, August 24 and 25, 1886. After six days' incubation in the moist chamber, from eight to twelve colonies of all kinds appeared on each square inch of surface. Most of these were moulds, which grew very rapidly, some were micrococci and some bacilli. As less than twelve colonies developed to the square inch, it is probable if the plates were exposed only an hour instead of 48 hours not more than one colony would be found on each four square inches. So that the danger of atmospheric infection from falling germs would be very slight under similar conditions. The danger would be, no doubt, increased by the movements of the assistants, and the increased circulation of air through the difference in temperature of the external and internal atmosphere when the room was in use.

Each took a sublimate bath (1-2000) and put on sterilized cotton suits. The hands and arms were then washed five minutes with warm water and green soap, and scrubbed with a brush, and then washed half a minute in a 1-1000 sublimate solution. The patient received substantially the same treatment.

The sponges were those prepared by Schorse, of Milwaukee.

The silk was boiled an hour in a 5 per cent. carbolic acid solution, and in some cases afterwards immersed in a solution of iodoform and ether and again sterilized by moist heat in a bottle stopped with cotton. This was done by placing the bottle in a pail containing an inch of water boiling for an hour. The instruments were boiled an hour in a 5 per cent. carbolic solution on the day before the operation and then dried. On the morning of the operation they were again boiled for a few minutes in a similar solution and placed in trays of sterilized water for use.

The water was sterilized by boiling in large tin cans, each holding 2 or 3 gallons, for an hour or more on three successive days. The cans had tin covers, put on over a rim of cotton to stop the crack between itself and the can.

The culture medium used for these investigations was sterilized, alkaline, peptonized beef tea gelatin. Most bacteria will grow in this medium at the temperature of a living-room. Answers have been sought through these investigations to the following questions:

1.—*Are the sponges sterile when rinsed out and ready for use?*

Pieces of each of the sponges to be used were cut off by the assistant who had the care of them and put into the gelatin with sterilized forceps. Three or four pieces were put in a single tube. In this tube you see three such pieces surrounded and permeated by the transparent nutrient gelatin.

*Read before the Chicago Gynæcological Society, April 17, 1887.

Out of twenty-five sponges from seven operations only a single sponge was found infected with a single colony.

In this tube are contained two pieces of sponge which are ready to use. Through attempted cultures from these prepared sponges and silk, answers to the following questions have been sought:

2.—*Are the sponges sterile when ready for use?*

After the sponges had been rinsed out in sterilized water three times, the assistant cut off small pieces from each of the sponges to be used with scissors, and they were put in a tube of liquified gelatin beef broth. This tube contains three such pieces of sponge surrounded by the clear solid gelatins.

Out of twenty-five sponges from seven operations only a single sponge was found infected with a single colony.

In this tube you will see the small triangular colony in the lower part of the upper sponge. With a small magnifying glass it seems to be a group of four or five spherical colonies in a cluster.

The sponge was used in operation xx., Nov. 30, sarcoma of the ovary, Emergency Hospital. In operation 2 you can see a small whitish colony in the lower part of the upper sponge. With a small magnifying glass it seems to be a group of four or five spherical colonies.

It would appear from this that the sponges are sterile at the beginning of the operations, and if sterile then of course aseptic.

Five or six pieces of silk were usually taken from as many needles, and an inch cut off from each and put in a single tube of gelatin.

More than thirty such pieces were examined from nine operations, and not a single colony developed.

In no case was the silk infected at the beginning of the operation.

3.—*Is the cat gut sterile?* (*Schorse's carbolized cat gut.*)

Several pieces at four operations were examined. In one case only did any colonies develop. In this tube you see two pieces of cat gut at the bottom of the clear gelatin. Clinging to the side of one piece you can discover a small spherical white colony, and a little distance from it in the gelatin another similar colony. This cat gut was from a new bottle of carbolized cat gut used in operation 5, in a private house in the country. It is difficult to say how significant their presence is. They might arise from any one of the following causes:

1. Imperfect primary sterilization of the cat gut.
2. Infection by floating germ or germs from the hands of the assistant when unwinding and cutting off the pieces.
3. Infection through transportation to and from the country.
4. Imperfect sterilization of the nutrient medium.

It is my own opinion that it is from infection through the second above named causes.

Thus out of over thirty tubes containing over sixty pieces of material taken before the operations, only *two* pieces were found infected with *three* colonies. This would indicate that the precautions taken are very successful at the beginning of the operations.

4.—*Are sponges sterile after they have been used?*

At the end of each operation small pieces of each of the sponges used were cut off and placed in gelatin in the same manner as at the beginning. They were usually stained with blood, and sometimes had pieces of the contents of the cysts clinging to them. Thirty pieces from eight operations were thus examined. In this tube, passed around, which contains two pieces of sponge from the last operation, No. 8, you see numerous colonies on the side of the upper sponge. They are spherical and whitish, and do not liquify the gelatin. The following is the list of sponges infected:

Operation 1. 5 sponges examined, 1 infected.

Operation 2. 2 sponges examined, 1 infected.

Operation 5. 4 sponges examined, 1 infected.

Operation 8. 2 sponges examined, 1 infected.

The sponges were generally sterile at the close of the operation, even though most of them had come in contact with the skin of the abdomen and the contents of the cysts.

It may seem strange that the sponges used in operation 4, pyo-salpinx, in which the cyst burst into the abdomen, in tearing it away from its adhesions, did not develop any colonies. Five sponges were examined, and all remained apparently sterile. From the pus in this cyst cultures were made in solid blood serum with the growth of a small micrococcus usually in the so-called diplococcus form, but this microbe would not grow in gelatin beef tea.

5.—*Is the silk sterile at the close of the operation and after it has been used as sutures?*

Out of twenty pieces of silk, often cut from the ends of abdominal sutures, only a single piece was infected with a single coccus form, viz.: one of the two pieces taken from operation 1.

Over fifty pieces of material, after being used in operations, and only five pieces—4 sponges and 1 piece of silk—were found infected. It does not seem, therefore, that the sponges and silk may be maintained sterile, so far as any germs that will grow in nutrient gelatin are concerned, even to the end of a long operation.

In marked contrast to these results appear those from an operation performed by another operator who kindly allowed similar examinations. The details of the preparations were given for publication.

The operating room was well washed with soap and water, both walls and floor. It was in a new house which had never contained a sick person.

The sponges were part new and part old, having been used in a previous abdominal section. After that operation they had been soaked a day in a strong solution of bicarbonate of soda, and washed out in a 5 per cent. solution of carbolic acid and hung away in a bag. On the day before the operation all the sponges were boiled in a porcelain kettle for more than an hour in a 2½ per cent. solution of carbolic acid, and put into a jar and taken to the operating room. The silk was boiled and carried in the same jar. The operator took a bath, and put on perfectly clean clothes on the morning of the operation. The assistants were instructed to do the same. The hands and arms of the assistant were washed in soap and water and then in a sublimate solution 1-1000.

The material examined consisted of four sponges and two pieces of silk before the operation, after the sponges were rinsed out, and the needles threaded, and of two sponges after the operation and several inches of the thread used. All the material was infected except one piece of silk examined at the beginning of the operation. Every sponge had at least one colony of the hay bacillus, and one sponge after use showed more than 50 small white colors in the clear gelatin in the upper part of the tube.

What influence the asepsis of the material has on the results of the operations to death or recovery is a question far beyond the scope of these investigations. It would require a large statistical material of well observed cases, and more work than could be done by one observer. But it may be safe to conclude that it is desirable to work through an abdominal operation with perfect asepsis everywhere, if such a thing is possible.

The above investigations have shown that such perfect asepsis can be attained. Thus if we are ignorant of the extent of danger from non-sterile material, we are hardly justified in trusting to the innocence or inocuousness of such an uncertainty while we can have the asepsis of the material an absolute guaranty against the dangers of infection.

Prescription for Headache.—The following is from Dujardin-Beaumetz:

Ethoxycafeine	gr. xij.
Sodii salicylat	gr. xv.
Aquæ destill.	ad. ℥i.

Dose.—Teaspoonful or tablespoonful.—*Med. Register.*

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

STATED MEETING HELD JUNE 22ND, 1887.

The President, H. AUGUSTUS WILSON, M.D., in the Chair.

Dr. Judson Daland reported a case of

PYOPNEUMOTHORAX OF NINE MONTHS' DURATION.

Through the kindness of Dr. Osler I am able to present this case to-night.

John L., æt. thirty-two, printer, single. Father died suddenly at the age of thirty-six, cause unknown. An only brother, aged thirty-four, living and well. Two maternal aunts died of phthisis. No other case of phthisis in the family. As a child he was always week and nervous; was never robust. He suffered from no special disease until the age of twenty-two, when he contracted syphilis. In 1880 he was operated upon for varicocele, and from that time until 1885 suffered from repeated attacks of articular rheumatism. About this time the removal of a corn from the ball of the left foot was followed by an abscess, which discharged a tablespoonful of pus daily for four months, and healing was not completed until six months later.

In the midst of apparent good health his present trouble began abruptly in 1885, with huskiness of the voice; slight dry cough soon becoming frequent, and accompanied by mucous expectoration. Two weeks after the appearance of the cough he was awakened from sleep by a pulmonary hemorrhage, which continued more or less for a month, and then gradually decreased in frequency until July, 1885, since which time they have occurred only at long intervals. These attacks of hæmoptysis would vary in frequency from four daily to one in two weeks; and in amount, from one to eight ounces. During this time he continued at work, though he noticed that it excited renewed attacks of bleeding, as would also the act of stooping to the floor.

About October 17, 1885, he suddenly experienced severe pain in the right chest, with cough and high fever, intense orthopnœa, etc. The shortness of breath moderated, and the pain disappeared in two weeks, but he was confined to his bed for three months.

When admitted to the University Hospital, March 12, 1886, he was markedly emaciated, having lost twenty-two pounds during the previous eight months. The chest presented a remarkable prominence, composed chiefly of the second piece of the sternum and attached cartilages. Immediately below the prominence there was a deep depression. This deformity has nothing to do with his present trouble, as it has existed from infancy. The apex beat is diffused, and can be plainly seen and felt in the seventh intercostal space in the mid-axillary line. Respirations are chiefly thoracic; expansion over upper part of right chest scarcely visible, and is absent at the base; over left base the expansion is increased. The thorax is long and narrow; intercostal space lessened; ribs more oblique, and in places overlapping; inferior costal angle acute. Vocal fremitus normal over left lung, diminished over right upper lobe, and abolished at base. Percussion note over right chest tympanitic down to the nipple, below which there is dulness. The recumbent position will lower the upper line of dulness four inches. All over the left lung the note on percussion is hyper-resonant. Auscultation of right chest shows well-marked metallic phenomena, namely, occasional metallic tinkling, amphoric breath sounds, amphoric echo of cough and voice, Hippocratic succession splash, and bell tympany. All over the left lung a greatly exaggerated respiratory murmur can be heard. The liver is displaced downward, and the heart to the left. A musical systolic murmur can be distinctly heard all over the præcordia, and is carried to the left. Since then the heart has returned almost to its normal position, and this murmur has disappeared.

On the 21st of March, 1886, the dyspnœa became more marked, temperature 101° F., and severe pain referred to the

depression in the lower part of the chest. The expectoration of eight ounces of blood seemed to give partial relief. The next day sixty-eight ounces of sero-pus were withdrawn by aspiration, with immediate relief to the breathing. In January, 1887, ten ounces more were removed, and in March an equal amount of pure pus was obtained. It required just one year for the sero-pus to become pure pus. Careful percussion immediately after the operation, and repeated again the following day, failed to show any lowering of the upper level of the dulness. After the last thoracentesis, about two weeks ago, when ten ounces of pus were again removed, it was noted that the upper level of the liquid fell one inch. A few hours later subcutaneous emphysema occurred around the puncture and spread over most of the right chest. This was due to the escape of gas from the pneumothorax.

Comparing his condition now with what it was fifteen months ago, it would seem that the dyspnœa is less, that the chest has retracted, and that the amount of liquid is less. This opinion is based on the fact that the heart and liver have returned almost to their normal position. The sputum is chiefly mucus or muco-purulent, small in amount, and contains a few bacilli.

From a careful study of the symptomatology and sputum, it would seem that this patient at first had phthisis of the right lung, and that ulceration into the pleural cavity occurred in October, 1886; this was followed by pneumothorax, which quickly became a hydropneumothorax, and he now has a pyopneumorthorax with a pulmonary fistula.

The slowness of the change from serum to pus is very unusual, and the absence of hectic fever is probably due to an altered condition of the pleura, rendering it non-absorbent. The recurrence of subcutaneous emphysema of thoracentesis is rather uncommon, and the disappearance of the musical systolic murmur is very interesting.

All authors upon this subject are of the opinion that in from sixty to eighty per cent. of all cases the cause of this condition is phthisis, and next in frequency stands emphysema. The other possible causes, such as gangrene, emphysema, rupture of subpleural abscess, are of such rare occurrence that they may be considered medical curiosities:

I beg leave to ask the following question:

In view of the probable phthisical condition of the compressed lung what would be the best treatment?

The patient referred to is in an adjoining room, where I shall be glad to demonstrate the physical signs to any one interested.

DISCUSSION.

Dr. James B. Walker said: I have, in the Philadelphia Hospital, a case similar to the one reported, with the exception that the lung affected is the left. The patient came into the hospital last spring, suffering with phthisis of the left apex and with pleuritic effusion. With the aspirator, I removed a quantity of pure serum. After the aspiration the patient developed pneumothorax. The patient was tapped a second time during the latter part of my term last year, and some purulent serum withdrawn. He left the hospital some time after this and went to the University, and pus was withdrawn by the aspirator. He recovered fairly his health and went out, and finally turned up at the Pennsylvania Hospital. There he was not tapped. He returned to my wards about one month ago with dulness on percussion over the lower portion of the chest, and other signs, as absence of respiratory murmur and of vocal fremitus, suggesting the presence of fluid. I tapped him, but found that there was nothing to withdraw, and evidently a plastic pleurisy alone existed. Although there was an advance in the disease at the left apex, the man had gained somewhat in flesh since last year. Had I found pus at the last tapping, I should have had a drainage tube inserted.

Dr. William H. Parrish said: It might be interesting if I were to report a case of pyopneumothorax in a child seven years of age, which occurred three

years ago. The case differed from those reported to-night, in that the affection was traumatic and occurred in a healthy child, of healthy parents. The child fell against the edge of a stove, producing some contusion of the chest, but not sufficient to give rise to anxiety on the part of the parents. Forty-eight hours later, pleurisy developed, and this subsequently passed into pleuropneumonia. So far as could be determined, there was no injury to the ribs. The symptoms became aggravated from day to day, and in the course of two weeks the rigors, high temperature, and physical signs suggested the existence of pus in the pleural cavity. Dr. John Keating saw the case with me, and we recommended opening of the cavity. The operation was deferred on account of the objections of the parents. There was a rapid accumulation of pus which pushed the diaphragm downward and caused some bulging of the tissues between the ribs. Consent to the operation was then given. The child was not etherized on account of its exhausted condition, and during its struggles there was a gush of pus from the mouth. An opening was made, however, above the fifth rib, a drainage tube introduced, and brought out through an opening below the same rib. The cavity was washed out daily with a solution of carbolic acid, and in six weeks there was decided improvement. The child is now the picture of health, and the lung seems to expand as freely as on the other side. The fistulous opening between the pleural cavity and the bronchial tube closed in four weeks. The error in the treatment of this case consisted in not making the opening sooner. I think that free incision and drainage, with washing out of the cavity, contributed much to the final recovery. I should prefer these measures to the use of the aspirator.

SPECIMENS EXHIBITED.

Dr. B. F. Baer exhibited a fibroid tumor of the uterus, and made some remarks relative to

HEMORRHAGE AT THE MENOPAUSE.

This tumor was removed yesterday from a lady aged 42 years. About a year ago she began to lose more than the normal amount at her periods. Soon after she suffered from attacks of metrorrhagia twice a month, sometimes almost to syncope. At times she would flow continuously for two weeks. Finally, in the intervals, she began to have a fetid, watery discharge. She was pale, emaciated, and cachectic.

Now, such a history often indicates the presence of cancer, but not always. It *never* means that the lady is simply near the menopause. A great deal of harm has been caused by that idea. In this case the physician thought that the hemorrhage was due to the menopause, and did not consider it necessary to make an examination. But finally the patient insisted upon it, in order to find out if there were not a local cause. He then made the examination, and diagnosed the case correctly. I saw the case in consultation, and removed this fibroid tumor, which is ulcerated at the base, and hence its fetid discharge.

I have known many instances where patients have been put off by the statement that the hemorrhage was due to the change of life, and almost bled to death from a pathological cause. Several years ago I reported a marked case of this kind, which was easily cured by the removal of a small polypus from the neck of the womb.* At first the hemorrhage was said to be menopausal. After a time the patient became cachetic, and the case was pronounced to be one of cancer. As cancer is properly regarded as incurable, it was considered unnecessary to submit the patient to an examination. This patient was cured by the removal of a fibroid polypus. I have actually known a patient to die from repeated hemorrhages caused by a benign disease, where the bleeding was first attributed to the menopause, and, finally, to cancer. I believe that great harm is often done by physicians putting patients off with the statement that the hemorrhage at this period of life is the

*The Significance of Metrorrhagia, etc. American Journal of Obstetrics, vol. xvii. No. 5, 1884.

result of the change of life, instead of seeking for the real cause.

Dr. G. B. Dunmire said: In this connection I would refer to the case of a patient of mine which nearly resulted seriously from my reluctance to examine unmarried ladies. The examination was put off until at last I was compelled to make it, because of the frequent and continuous menorrhagic attacks and the anæmic condition of the patient. I found a small vascular polypus, which was removed, and the patient recovered.

CIRRHOSED AND CYSTIC OVARIES.

Dr. J. M. Baldy exhibited some specimens of cirrhosed and cystic ovaries, removed from Mrs. S., under the care of Dr. Wolfe, of Skippack, Pa. The patient married four years ago, at which time she was in perfect health. Shortly after marriage she had a miscarriage; since then there have been several. Since the first miscarriage, she has suffered pain constantly, and the menses have been profuse. Dr. Wolfe recognized a tender mass posterior to the uterus. I found, on examination, what was evidently a prolapsed ovary, enlarged, adherent, and very tender. She bled for three days after the examination, and suffered great pain, as she had always done before under examination. I removed both ovaries last Thursday. Since the operation the patient has been doing well. To-day, the sixth day, her temperature is 99.8°, and her pulse is 72.

Abstracts and Extracts.

PRECOCIUS GUMMATA.—The close and widespread study of syphilis within the past fifteen years has conclusively shown that the old and dogmatic division of the disease into three sharply marked periods must soon be very much modified, or perhaps even discarded, and that, although the terms primary, secondary, and tertiary, as applied to stages of syphilis, present the advantage of clearness and simplicity in study and description, and may even be clinically true as regards a large number of cases, yet there are very many in which such a division is inappropriate, since we observe in some the so-called tertiary-lesions of the tertiary period, and perhaps coexisting with well-marked lesions of that period; or, again cases of tertiary lesions concomitant with secondary lesions. To hold, then, that superficial lesions belong to and are only found in the early or secondary period, and that they are followed later on by lesions involving the tissues more profoundly, is in reality to sacrifice facts for simplicity of description.

Though there exist comprehensive descriptions of precocious nervous, osseous, articular, ocular, and superficial ulcerative dermal affections due to syphilis, a systematic description of the clinical history of precocious gummata is wanting. In *The American Journal of the Medical Sciences* for July, Dr. Robert W. Taylor presents the clinical histories of a selected number of his cases, from which he traces a clear and satisfactory description of these not common nor yet infrequent eruptions. His studies convince him that there are three forms of the precocious gummata: The first, the generalized form; the second, the localized form; and the third the neurotic form, which in some of its features resembles erythema nodosum. Of each of these three forms, moreover, there are two varieties: a resolutive, or non-ulcerative, and an ulcerative variety.

The clinical history of the generalized form of precocious syphilide is as follows: As early as the eighth week of infection the patient notices either small circumscribed swellings under the skin generally unattended with pain, and only perceptible to the touch, or this stage may escape him, and his attention is at first arrested by a number of bright red spots. These gummata are found to be round tumors of the size of a bean, deeply set in the skin, having a bright red color which at the first is dissipated by pressure, but becoming deeper, more sombre and permanent in color later on. They increase peripherally quite rapidly, so that within a week or ten days they may attain an

area of an inch symmetrically over the whole body. As they grow they are followed by new ones which come along with greater or less rapidity, in proportion as internal medication is pushed. If appropriate treatment be instituted, the first crop may be the only one. Unaffected by medicine their evolution continues, and in a fortnight the arms, forearms, perhaps the scapular region, not infrequently the back and anterior surface of the trunk, the gluteal regions thighs, and legs are invaded by these tumors.

The course of these gummata is, in general, quite regular and not subject to great variation. When developed they present a quite firm sensation, and this may be termed the period of condensation. As they grow older the red color becomes rather coppery, and while the periphery of the tumor may or may not seem firm, the central portions appear softer to the touch, conveying the impression that the tissues are permeated with a thick fluid. This we may denominate the stage of softening. In the majority of the cases there is not abscess formation, but rather a liquefaction of the gummy infiltration, which is, in general promptly absorbed. The time occupied in the full development of these tumors is usually from ten days to two weeks, and after that their period of duration is variable.

In the ulcerative variety, the stage of condensation is very short, and softening in a marked degree is observed in a few days. The centre of the tumors assume a dark red color in one or in several spots, and a sensation of fluid under the epidermis is distinctly made out. Then a slight ulceration may occur in spots, often at the openings of the hair and sebaceous follicles, and very soon the epidermal roof of the tumor melts away and we soon see the gummatous ulcer with its slightly thickened, reddened, undermined, and perhaps everted edges, and its floor of a greenish-red, bathed in an unhealthy sanious pus.

In the *localized* form, the clinical history is similar to that proceeding. The clinical history of the *neurotic* form has an individuality of its own. In the very early months of the diathesis, either in the stationary period of an early syphilide or at its decline, generally preceded or accompanied by severe neuralgic symptoms involving any cutaneous nerve by severe cephalalgia, continuous or nocturnal; by rheumatoid pains in muscles or joints, and by general malaise and debility, this eruption makes its appearance with more or less promptitude and develops quite rapidly. In some instances the invasion is very acute, so that at the end of a week we may find fully developed tumors an inch or two long, in others and in the majority of instances the development is slower, and nearly two weeks elapse. Besides the general neuralgic symptoms, local pains on the site of the lesions or in the whole territory on which they are developed are experienced. These may be continuous or intermittent, and in some cases are as excruciating as in severe herpes zoster.

The eruption consists of two orders of lesions; first, tumors or nodosities seated in the subcutaneous tissue, and freely movable under the skin and over the fasciæ, though as they increase they may contract adhesions on boths surfaces; second, oval or round tumors, or irregular plaques from fusion of tumors. The appearance and cause of the tumors are fully described.

In all cases of precocious gummata, the use of iodide of potassium is indicated, either combined with a mercurial or with the use of inunctions of mercurial ointment.

Treatment of Chronic Syphilis.—In the treatment of chronic syphilis but too often it happens that the patient improves up to a certain point and then ceases to respond to the administration of anti-syphilitic remedies, even when they be combined with the most careful hygienic treatment and the exhibition of tonics, etc.

Any remedy which offers a fair probability of being able to carry on the amelioration of the disease under these circumstances is one worthy of very careful consideration by the profession.

Many years ago Mr. Carmichael, of

Dublin, asserted that he found the oil of turpentine often of unquestionable value in the treatment of obstinate and long-continued syphilitic iritis, and during the service of Mr. G. J. Guthrie, of the Royal Ophthalmic Westminister Hospital, the practice was accompanied with alleged excellent results.

Mr. Jabez Hogg of the same hospital has recently (*Medical Press and Circular*, April 27) published the account of a case in which, after the failure of mercurials by the mouth, by inunction, and fumigation conjoined or alternated with the use of mydriatics, tonics, iodide of ammonium, iron, etc., turpetine succeeded. It was given in ½-drachm doses, suspended in mucilage, three times a day after meals. For the first week an inunction of a twenty per cent. solution of the oleate of mercury was freely employed, but this was then laid aside, and for four months the turpentine alone was steadily persevered in. Not only was the patient's general health improved, but the corneal opacity of the iritis gradually disappeared, and at the time of the making of the report the serous exudations and other local changes in the eye had so far been absorbed or ameliorated that the vision was almost what it was before the inflammatory attack, fourteen months previous.—*Ther. Gaz.*

Pre-digested Foods.—There is a prejudice against prepared food, quite general but disappearing; a prejudice born of ignorance like most others. The medical profession already regards them as useful, almost invaluable for infants and invalids. Necessity—the mother of invention—has led to the adoption of artificial digestive powers. And this incapacity is more common than one would think, coming from mental worry, exhaustion, intemperance, the opium habit, disease, accident, negligence, etc., and nervous people are proverbially dyspeptic.

An American, especially a Yankee, eating, reminds one of the walking-beam of a steamboat, when one end is up the other end is down. And so at meals, when the drink hand goes up the food hand goes down, and *vice versa*.

The body demands for its sufficient sustenance, for the muscles—food rich in nitrogen; for the maintenance of animal heat—carbonaceous food; for the brain and nerves—phosphates. We find albumen in the muscles and flesh, and so it is necessary for the building up of tissue. But when the liver is deranged, the digestion of albuminoids cannot properly be performed, hence only in a pre-digested form can it be assimilated by the system.

Albumen is found in milk and in smaller proportion in cereals as the gluten of wheat. Phosphate of lime is required for the bones, and is furnished by cereals and milk. Milk Sugar is a desirable need for old people and children for obvious reasons.

"Baby Foods" generally lack fat; fat is essential to healthy tissue, and therefore foods containing milk are the most complete, as from the milk a certain amount of fat is present, and then they are the most palatable. The principle which should underlie all baby foods, is the conversion of insoluble starch into soluble matters, to prevent its irritant presence setting up diarrhœa for its removal. When cereals are cooked by high steam heat, the starch transformation into soluble dextrine is more complete. And as the digestive organs become enfeebled by the advance of civilization, pre-digested starch must come more and more to the front. Babies have their choice of food just as much as their elders, and they show it by rejection of one food and delight in another. As they also show ability to digest and assimilate easily and thoroughly the food. But because one kind or form of prepared food is distasteful and disagreeable, it does not follow that all are so. Wells, Richardson & Co., of Burlington, Vt., manufacture "Lactated Food," which is a restorative and constructive in various conditions of the system. It is meeting with great success in the diet of invalids and children, and it is received with approval by food experts at home and abroad.

Analysis shows its component parts

more nearly similar to mother's milk than is cow's milk. Its nutritive elements are derived from the three great cereals, wheat, barley and oats. From wheat is taken the pure gluten; from the barley, all the soluble albuminoid and extractive matter resulting from the most careful malting; and from the oat, the strengthening properties for which it is so well-known. By reason of the fact that it is partially digested in process of preparation, it is assimilated by the feeblest stomach, and no undigested particles pass into the bowels to irritate, and thus cause troublesome and dangerous bowel troubles.

Its basis is Milk Sugar, which never causes acetic fermentation. The gluten flour is partially torrefied and every particle is subjected to the action of the malto-diastase thus transforming the starch into soluble carbo-hydrates. So that, although by reason of weakening of the natural forces and impairment of the digestive functions the conversion of starch is so slight that the stomach is hampered and strained, nutrition may be kept up by the use of prepared foods. And when, in the case of infants deprived of mother's nursing, cow's milk disagrees and a wet nurse renders its chances of life precarious, Lactated Food is a valuable reliance and support.

Picrate of Ammonia in Malarial Fevers.—Dr. S. E. Fuller, of Brooklyn, N. Y., writes to the *Medical Record* of July 21, 1887: Having been for many years a sufferer from choronic malaria, and being at the time afflicted with an unusually severe attack, for which I had taken the usual remedies without receiving any benefit, I at once procured some of "Merck's" picrate of ammonia, and began its use in half-grain doses (made into a pill with extract of gentian) three times a day. In three days time there was marked improvement in all my symptoms. Had no more chills, pain in head and back had left me, and I awoke in the morning without those terribly exhausted and irritable feelings which those who suffer from this disease so well know. This result encouraged me to make a trial of the drug in several cases of similar trouble in which I had been using quinine, etc. I prescribed it for six adults, of both sexes, and kept watch of the effect. In all but one case the same marked improvement speedily resulted. I now began to notice a peculiar, deep orange-color in my urine, without any change in quantity and a chemical analysis of it showed that except for the change in color it was normal. Upon inquiry I found that the urine of all the patients was of this same orange-color. Having taken the medicine myself in doses as above mentioned for ten days, I decided to stop its use and watch for the disappearance of this color from the urine. To-day, May 24th, seven days since stopping the medicine, there is not the least improvement in the color of my urine, and the whites of my eyes, and the skin of my face generally, are the color of one mildly jaundiced. The same thing has occurred to all my patients who have taken the remedy for a week. One lady, to whom I gave the maximum dose, one and a half grain three times a day for eight days, is now deeply jaundiced, the color involving not only the whites of the eyes and the skin of her face, but also the skin of her neck and breast, from which, shading to a light color, it covers the rest of her body. In each case the tongue is clean, bowels not affected, and appetite good. I do not understand why the discoloration of the urine remains so long after stopping the medicine, or why it should cause discoloration of the skin at so late a day.

Treatment of Cholera Infantum in the New York Infant Asylum.—Dr. L. Emmett Holt holds that as pure air and proper feeding are the most important things in prophylaxis, so they are the most important in the treatment of this disease. Sick or well, there is no food for a baby that compares with good breast milk. If this is being used, or can be obtained, the quantity only needs to be regulated. Not more than half the child's allowance when well should be given, and if the stomach is very irritable, all food should be withheld for half a day or a day, giving

nothing but toast-water or thin whey to allay thirst. If a child has been weaned, or good breast milk cannot be obtained, cow's milk had best not be trusted, as it is so easily changed in hot weather, especially in cities and among the poor. In the country, where fresh milk can be obtained twice a day, it may not hold; but in the city, children certainly do better when milk is withheld, and other articles not so prone to fermentation are given. Chicken, beef, and mutton broths, expressed juice of roast beef or steak, wine-whey, white of egg shaken up with water, rice-water, barley-water, or the malted foods, koumyss, and in some cases raw scraped beef, are articles which may replace milk.

The first indication in every case, except true choleriform diarrhœa, is to clear out the bowels as completely as possible, by a good dose of castor oil, or by one or two grains of calomel in the form of tablet triturates. This will be sufficient to cure a large number of the milder cases, if taken early, provided the feeding rules laid down are carefully followed. In more severe cases, and in those of longer standing, a simple clearing out produces only temporary improvement; further measures must be taken to restore healthy action of the alimentary tract and stop decomposition. Salicylate of sodium, in grains j–ij doses, every two hours, or naphthalin in double the amount, we have found the most useful.

High temperature should be reduced by baths or cold sponging. It should not be forgotten that this may come from septic absorption from the bowels; if the temperature has risen coincidently with a great reduction in the number of discharges, a brisk cathartic will prove the most efficient antipyretic.

Cerebral symptoms may likewise be toxic, and, if so, should be treated in the same manner.

The object of treatment is not simply to arrest the discharges, but to restore their healthy character. Hence, opiates are not admissible at the outset, and never during the course of the disease when the discharges are foul and offensive. The retention in the intestinal canal of such matters, loaded with bacteria, can only result in harm.

Last summer, in this Asylum, a trial was made of the method of irrigation of the bowels with simple water or weak astringent solutions, in twenty-one cases. Only eleven were cured by this treatment alone. Although the results were not so gratifying as was anticipated from the accounts published in Germany, still some very bad cases did surprisingly well under it. It is certainly deserving of a more extended trial, as a valuable addition to our therapeutics.

True choleriform diarrhœa was treated in a few cases by hypodermatics of morphia and atropia; one or two yielded quite promptly; others, no more servere apparently, were uninfluenced by it.—*Med. News.*

The Pupil in its Semeiological Aspect—Many observations have been made, from numerous standpoints, regarding pupillary conditions, yet with a few notable exceptions they have been studied in an isolated manner, relative to the particular disease or lesion of which they might be more or less symptomatic. They have been often looked upon, and are still regarded by some, as curious, interesting, but erratic phenomena, far too variable to be depended upon, and without any connecting thread upon which these conditions, as seen in a variety of diseases, could be strung. Few attempts have been made to grasp pupillary manifestations as a whole, still fewer to reduce the varying phenomena to principles or to reduce the laws by which they controlled.

In an interesting paper in the July number of *The American Journal of the Medical Sciences*, Mr. William Macewen, of Glasgow, gives a brief outline of the physiological phenomenon pertaining to the movements of the pupil and then presents a series of personal observations.

He cites evidence to show that the suspension or abolition of cerebral function in the living body is attended by mydriasis, the latter being the sequent of the former. If inquiry

be made concerning the mechanism inducing this pupillary effect coincident with the arrest of cerebral function, the theory which explains the greater part, if not the whole of the phenomena, is that which has been so ably advocated by Mosso. The passive movements of the pupil are regulated by the vascular system of the iris, which is in complete harmony with that of the encephalon. In these conditions inducing general suspension of the cerebral function a state of ischæmia prevails in the brain and iris inducing mydriasis. This, likewise, obtains in unilateral lesions, where the pressure is so great as to induce anæmia of brain and iris inducing mydriasis. This, likewise, obtains in unilateral lesions, where the pressure is so great as to induce anæmia of brain and iris. Myosis may also be brought about by a like mechanism acting in the opposite direction. The "irritation" setting up congestion of the cerebral and meningeal vessels, leads to congestion of the vessels of the iris, and so produces contraction of the pupil.

Dr. Macewen shows that when the function of the brain is in abeyance the pupils are in a state of stable mydriasis.

When the function of the brain is interferred with by conditions usually included under the term "irritation," the pupils are in a state of myosis, sometimes labile, but generally stabile myosis.

The same pathological factors which cause myosis may also cause mydriasis, the degree in which these factors are present being the determining point between the former and the latter, and not merely the particular locus in the brain.

When the function of one-half of the cerebrum is placed in abeyance by a superficial or cortical lesion, the pupil on the same side as the lesion is in a state of stabile mydriasis.

When the function of one-half of the cerebrum is interfered with by some source of cortical irritation, the pupil on the corresponding side to the lesion is in a state of myosis.

Hemorrhage into the pons Varolii when strong causes strongly contracted pupils; but when it is more extensive involving the gray matter beneath the aqueduct of Sylvius, a state of stable mydriasis is induced.

Dr. Macewen concludes by pointing out the condition under which myosis and mydriasis occur.

Pathogeny of Gastric Ulcer.—The precise pathogeny of chronic ulcer of the stomach is one of those undetermined questions which have led to considerable speculation, with comparatively little profit. The position, form, and nature of the ulcer have done more than any positive demonstration of the vascular lesion to favor the current doctrine of its dependence on arterial blocking. But every one knows the difficulties in the way of the acceptance of this view, not the least being the comparative frequency of the disease in the female sex, and the great preponderance of cases where the ulcer is solitary and seated on the posterior surface near the lesser curvature. Dr. Decker, of Würzburg, has the last word on the subject (*Berl. Klin. Wochenshrift*, No. 21), and he advances evidence in support of the initial lesion being traumatic, or rather thermal. Thus, he believes that the contact of hot thickened fluids with the gastric mucosa excites hyperæmia, which becomes localized, and may lead to venous stasis and hemorrhage in a limited territory, with all the subsequent necrotic changes. He supports his view not only by reference to the clinical history of cases of gastric ulcer (he points to the great prevalence of gastric ulcer among cooks, who habitually test the flavor of their dishes when very hot), but by two experiments on dogs into whose stomach food heated to 50° C. was introduced. In one of the animals a patch of hyperæmia, with hemorrhage between the gastric mucosa and muscularis near the lower curvature, was found; in the other, a deep ulcer of characteristic shape and position had been produced. *The Lancet.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JULY 16, 1887.

Editorial.

THE COMPARATIVE FREQUENCY OF THE CHANCROID.—In a paper, with the above title, recently read before the American Association of Genito-Urinary Surgeons, by Dr. Greenough, of Boston, a number of instructive statements were presented bearing upon the statistics of chancroid and the management of this lesion. Dr. Greenough gave a total 1,593 cases which come under his observation at the Boston Dispensary from July 1, 1873, to March 31, 1887. Of these cases 391 were chancroids, 219 true chancres, 931 doubtful, and 52 herpes progenitalis, making the chancroid stand in proportion to other lesions in the ratio of 1 to 3. In Dr. Greenough's private case-books this ratio was changed to 1 to 10; thus of 100 cases seen, 10 were chancroids, 63 true chancres, 13 doubtful and 14 herpes progenitalis. These latter statistics were regarded as more reliable as the diagnosis was made after having the patient under continued observation. Dr. Greenough's statistics show a diminution in the frequency of chancroid which is explained by a number of facts. The type of the disease has been changed by treatment and its frequency has been lessened in recent years by the greater care and attention given to cleanliness and to hygienic measures. Herpes progenitalis has been frequently mistaken for chancroid and the treatment by cauterization of this lesion has made it a good imitation of chancroid. This same statement is also true of a not uncommon inflammation of a sebaceous follicle on the shaft of the penis. These facts go to show that chancroids are frequently manufactured by cauterization of venereal sores which are not chancroidal. Since syphilographers have recognized this condition chancroids have diminished in frequency.

The comparative infrequency of chancroid in private practice is in a measure explained by a statement made by Dr. P. A. Morrow, in the discussion which followed the reading of Dr. Greenough's paper, to the effect that he has always been accustomed to regard chancre as a much more aristocratic disease than chancroid; a sort of sign or seal of gentility on the part of the bearer. In dispensary practice Dr. Morrow has seen possibly three chancroids to one chancre, whilst in his private practice it is extremely rare for him to treat a chancroid.

The presence of a virulent bubo Dr. Greenough had not seen more frequently in connection with a chancroid than with a true chancre. Dr. Sturgis observed that the proportion of suppurating buboes is very small; according to statistics he had collected at Charity Hospitals and other dispensaries the proportion was not more than 1 to 4. Dr. Morrow could offer no statistics on this point, but he thought that it had a very important bearing upon the determination of the fact whether the chancroid is due to a special virus or is simply an inflammatory product. The question of treatment by cauterization was raised by Dr. Greenough, who thought it manifest that this old plan should be abandoned. On the other hand, Dr. Otis held that the immediate destruction of the chancroid was desirable in every case excepting where the extent of the inflammatory condition or other local state contraindicate it. When a chancroid makes its appearance his practice is to cauterize it with a drop of nitric acid. Dr. Otis has never seen inflammatory trouble set up by a local application of the cautery and he regarded this method of arresting chancroidal action the surest way of preventing a purulent bubo.

Cattle-Horn Laceration of the Abdomen and Uterus in Pregnant Women.—Under the above tittle Dr. R. P. Harris, of Philadelphia discusses in the *American Journal of Obstetrics* (July, 1887) the operation of Cæsarean section and the statistics of the procedure under the old and under the modern methods of operation and treatment.

Dr. Harris has attempted to show that the mortality of the Cæsarean section has been due not only to faulty methods of closing the uterine wound but to the delay in operation, to the fact that the operation was seldom resorted to until the patient was *in extremis*. To make the statistics of the old method of Cæsarean section as ridiculous as possible Dr. Harris presents, by way of comparison, a report of nine cases of cattle-horn laceration of the abdomen and uterus in pregnant women from which it appears that the cow and her congeners of the horny family, the bull, ox and buffalo, have produced better proportionate results than have been secured by the knife. Whilst five women and five children out of nine laparo-hysterotic rips have been saved, the statistics of the United State during the past seven years show that only five women and ten children out of twenty-seven Cæsarean sections have been saved.

The reason for this difference in results is quite apparent. No one will venture to say that a lacerated wound inflicted by a cow-horn is at all desirable or that it is preferable to the incised wound made by the surgeon's knife. The condition of the woman at the time the cow-horn wound was inflicted and the condition of the woman undergoing a Cæsarean section are two different things, and it is to this difference that we must refer the relative degree of risk and the cause of death.

The operation of Cæserean section is a blot upon American and English midwifery practice. Why? Simply for the reason that the operation has not been made one of election. It has seldom if ever been undertaken until it become a *dernier resort*, a last hope when the unfortunate patient was almost moribund. Under such circumstances no one can question the advantages of the cow-horn laparotomy which has usually been inflicted when the woman possessed at the least a moderate degree of vitality. It is scarcely fair to even compare the old Cæsarean section with the cow-horn laparotomies for if any procedure is entitled to be classed with the relics of barbarism this honor belongs to the old classical Cæsarean operation as almost universally practiced in America and England. The cow-horn laparotomy throws a brilliant light upon the Cæsarean operation when conditions are reversed. If five women and five children survive nine cow-horn laparotomies inflicted when these women were in the enjoyment of health, how much better would have been the results in the cases of these same women and children had the section been made under anæsthesia and under the skillful use of the surgeon's knife? The results now secured by the Sänger modification of the Cæsarean section give an approximate answer to this inquiry. In two German and one Austrian Maternities twenty-two women and twenty-three children have been saved by twenty-three operations. The Sänger method has not only demonstrated the value of antisepsis and the peculiar closing of the uterine wound, but it has emphasized the great importance of operating under conditions favorable to success with the knife. Our Continental brethren have learned the value of pelvimetry in deciding whether a patient should be operated by the Sänger section or by forceps, version or craniotomy. The procedure is selected at a sufficiently early date to render success not only possible but highly probable. The humane effects of such consideration given to the Sänger section are shown by the statistics above given which clearly prove that the main facts necessary to a successful Cæsarean operation are cleanliness, careful closure of uterine wound and an early performance of the operation.

Miscellany.

The Remedial Value of Bloodletting.—It has often seemed a matter of regret that a remedy of such unquestionable power as bloodletting should, from former abuse be reckoned by many as among the things of the past, and that it should have run the risk of being denied all virtue, because of some inherent faults, which, however, are quite capable of compensation. Its very power, and the exact results which in fitting cases attend its employment, doubtless led to its indiscriminate use, and, inasmuch as it is spoliative in its nature—a power fraught, it may be, with the greatest evil—it is not difficult to see how readily it might be abused.

Dr. J. A. Macdougall, of Carlisle, in the July number of *The American Journal of the Medical Sciences*, makes an able plea for its more frequent use, and cites clinical evidences of its value. He points out that with that greater skill which is undoubtedly ours, with that more intimate acquaintance with physiological and pathological processes, we are better able to judge the exact capability of such a remedy, and when we recognize in it the power to modify the distribution of the blood, and to diminish pressure within the vascular system, then we are moving on such lines as are well fitted to guide us in its employment. That it can do more than these things is probable. That it does act as a derivative, that it is a powerful though dangerous sedative, and that its employment facilitates the action of other remedies, is all possible, and although he believes that few would incline to employ it for such ends solely, its possession of such potentialities may render it of wider service than we anticipate when we use it.

Osmic Acid in Sciatica.—Neuher first suggested osmic acid as an antineuralgic remedy, and published the results of three cases, two of sciatic neuralgia, and one of the facial. From ten to twenty-five injections were required to effect a cure. Eulenberg obtained three radical cures and four ameliorations out of twelve case. Many others have used it with very much the same results, *i. e.*, with benefit in some cases, and without benefit in others. Dr. Stékoulis has tried it in twelve cases (six men and four women) of idiopathic sciatica, the duration of which varied from fifteen days two years. The result of the treatment was eight successes,one much improved, and one in which the remedy proved inert, after four injections, beyond which the patient refused to go. Its effect is explained by the well-known effect of osmic acid on certain constitutents of nerve-tissue. No abscesses nor other inconvenience followed its use beyond the pain at the time of the injection. An aqueous solution, containing 1 per cent. of acid,is generally used, of which about sixteen minims are injected. It stains the skin and clothes black. The injection should be made *loco dolenti*, at first daily, and then less frequently.—*London Medical Record.*

Funds for the Ninth International Medical Congress.—At the recent meeting of the Executive Committee of the Congress, it was directed that all receipts from the membership fees be reserved for the publication of the transactions, and the $10,000 appropriated by Congress, with so much of the moneys donated by individuals,medical societies, etc., as may be necessary, may be used for preliminary printing and for the accommodation and entertainment of the Congress. At a recent meeting of the Illinois State Medical Society an appropriation of $750 was made; at the meeting of the American Medical Association, $1,000; at the meeting of the Kentucky State Society, $250; and the Faculty of the Medico-Chirurgical College, of Philadelphia contributed $100. These contributions added to those previously, give assurance that the financial interests of the Congress will be well sustained.—*Journal of American Medical Association.*

Prevention of Summer Diarrhœas.—But in the prevention of the summer diarrhœas, attention to the food must

not stop with its introduction into the body. The ferment which produces tyrotoxicon is widely distributed, and it only awaits conditions suitable for its development. We do not know exactly what germ it is that produces this poison; but it is either the butyric acid ferment or some ferment which is frequently developed along with the *bacillus butyricus*, because I have found that if some butyric acid ferment be prepared according to the method usually followed in making butyric acid, and milk be inoculated with this and allowed to stand at the temperature of the body for a few hours or at an ordinary temperature of the room for for several days, the poison will appear. Moreover, as is well known, the *bacillus butyricus* grows best in the absence of air, we have already seen that the exclusion of air favors the development of tyrotoxicon. We are aware of the fact that the butyric acid ferment frequently does develop in the stomach. Therefore, I think that the prevention of these diseases necessitates some attention to digestion. If the food lies in the stomach or intestine undigested, putrefactive changes will occur there.

During the hot months, children who are allowed to take food at will, often drink large quantities of milk simply for the purpose of quenching thirst. I feel that this overloading the stomach with milk, caused by thirst, often is of no little detriment. It is hardly necessary to specify in regard to other ways in which attention should be given to the digestive organs of children. Those that partake of other foods with their milk should be allowed only the most wholesome articles, and these should be in most perfect condition. Moreover, the depressing effects of extreme heat on the nervous system and its consequent injury to digestion should always be borne in mind.—*V. C. Vaughan, M.D.*

What to do When Summer Diarrhœas Occur.—*The first thing to do is stop the administration of milk in any form.* The ferment is present in the alimentary canal and giving the best of milk would simply be supplying the germ with material for the production of the poison. This no milk treatment is not by any means a new idea; but the reason for it has not hitherto been understood. Now that we know that a powerful poison is formed from the putrefaction of milk, the necessity of its exclusion must become apparent to all.

The food used may consist of chicken and mutton broths, beef juice, and rice or barley water. With this list no difficulty will be experienced in giving the child sufficient nourishment.—*V. C. Vaughan, M.D.*

Cocaine and Borated Cotton.—Cotton prepared after the following formula is very useful in burns:

Solution of cocaine, 2 per cent.	30	parts.
Boric acid . .	2	"
Glycerine . .	4	"
Cobolic acid . .	1	"
Absorbent corton .	30	"

Dissolve the boric acid in glycerine, add the cocaine solution, and to this add the carbolic acid. The cotton should be thoroughly soaked in the mixture, and dried in a current of warm air.—*Les Nouveaux Remèdes*, May 8, 1887.—*Med. News.*

Tests for the Purity of Cocaine.—1. When heated upon platinum it must disappear without residue. 2. Solutions of cocaine must be of neutral reaction. 3. Sulphuric acid, when added, should not discolor its solution. 4. When to a solution of cocaine, 1 to 200 or 1 to 500, one drop of a two per cent. solution of potass. permanganate is added, the liquid should become red but remain clear. If the permanganate is added in drops beyond this point, a red precipitate of cocaine will fall, which will become brown on heating, but will give no odor of bitter almond.—*Med. Record.*

The Cure for Doctors' Quarrels.—The *Detroit Lancet* says the most quarrelsome doctors have one common characteristic, as a rule, viz., lack of a generous, broad culture. A doctor having

such a culture will regard his time and strength altogether too precious to waste in any personal controversy. For the cure of doctors' quarrels, medical college and hospital training is advised. Thus doctors would learn the manners of gentlemen and of professional gentlemen.—*Med. Rec.*

Cataract Produced by Sounds or Noises. — Stein ("Ctrbl. f. prakt. Augenh.") has been experimenting upon guinea-pigs with a view to the production of opacities in the lens by the repetition of sudden and continuous sounds. The eyes were previously examined carefully, and then the animals were placed in a box on which and electrical tuning-fork was fastened. Here they were kept for a few days without the fork being caused to sound. The first experiment was made on a guinea-pig, two days old, with a tuning-fork D, with 100 vibrations. At first the animal was unruly and cried. After three or four hours the pupil became widely dilated, and after twelve hours there was seen a stellate figure on the posterior surface of the lens, near the equator, which in the next twenty-four hours gradually extended through the lens. Then the opacity began to fade slowly, and disappeared entirely in four or five days.

The second experiment was made on an animal three days old, and with a fork of 250 vibrations. After twenty-four hours a stellate opacity appeared on the anterior surface of the lens, and two days later a similar one on the posterior surface. These disappeared subsequently, as in the first case. The third experiment was on an animal five weeks old, with a fork of 100 vibrations. In forty-eight hours dense triangular opacities appeared at the equator, which disappeared in a week. The eyes, on being enucleated, showed an anterior stellate cataract, or a posterior stellate cataract, or a posterior cortical cataract or a combination of all three forms. —*N. Y. Med. Jour.*

General Paralysis and Menstrual Disorder.—Some years ago Berthier published an interesting monograph, *Des Neuroses Menstruelles*, in which 242 cases of these neuroses were presented, 4 of them being instances of general paralysis following amenorrhœa, in one of which the suppression occurred normally and recently. More recently Petit, in the *Archives de Tocologie* of April 30th, concludes, from the study of fifty-nine cases of general paralysis in women, that there is an intimate relation between this disease and disordered menstruation. He believes that the development of general paralysis in women most frequently causes these disorders. They are characterized in some cases by a sudden and final arrest of the menses, and in others by a remarkable irregularity of the periods which had hitherto been normal. In the cases from which he draws these conclusions, menstruation was normal in only seven, and disordered in fifty-two.

In the light of such facts, it still seems doubtful if menstrual disorders should in all cases be attributed to the disease. Probably the most frequent cause of general paralysis, syphilis, is in the great majority of cases also the cause of the following, or of the preceding amenorrhœa. Seventy-five per cent. of cases of general paralysis can be attributed to syphilis, and whenever this disease becomes grave, menstruation is very liable to be disordered, the flow usually being retarded at first, then becoming scantier, and, finally, a protracted or permanent amenorrhœa succeeds. We believe, therefore, that so far as the majority of cases is concerned, in syphilis rather than in general paralysis, is to be found the explanation of the amenorrhœa so commonly observed in the latter disease.—*Med. News.*

Tincture of Siegesbeckia Orientalis in Ringworm.—Dr. J. Hutchison says in the *British Medical Journal:* Of the drugs now generally prescribed in the treatment of tinea in its several varieties some are exhibited in the form of ointments, and ointments are always more or less disagreeable to use; others free from greasy annoyances, give the patient more or less pain in the application. The preparation I have been using for some time past is devoid of

both these drawbacks, and at the same time is a speedy and reliable means of curing the disease.

Siegesbeckia orientalis is a shrub, the green part of which have quite a reputation in the Mauritius. For internal administration a syrup is prepared by pounding the green plant, adding sugar, and straining. This syrup is considered a powerful alterative, and is given in syphilis, gout, scurvy, scrofula, etc. For external use a poultice is made of the bruised leaves, and applied to gangrenous and sloughing sores with marked healing effect. By the enterprise of Messrs. Thos. Christy and Co., London, the plant has been introduced into England and placed within the reach of medical men here. From them I received a supply of the tincture, and have been prescribing it with varying degrees of success in different diseases. It is, however, to its value in treating the several varieties of tinea that I now wish to draw attention.

I have used it in fifteen cases of ringworm; of these, eight were cases of tinea circinata, four of tinea sycosis, two of tinea tonsurans, and one of tinea versicolor. The site of the eight cases of tinea circinata was in six of them upon the neck, and in two upon the calf of the leg. None of the patients called upon me till the disease was well developed, when the red, raised, circular bounding edge, and the pale central area with its branny desquamation, left little doubt of the diagnosis. The four patients who were afflicted with tinea sycosis all blamed a "foul shave" for their ailment. In all of them the disease was upon the chin, and presented the characteristic fig-like appearance. The two cases of tinea tonsurans showed the roundness of the diseased patches, the scaly eruption, and the brittleness of the hairs peculiar to that form of the trouble. The one case of tinea versicolor was also typical.

My prescription in all of them was the same namely, equal parts of tincture of siegesbeckia and glycerine, and this I ordered to be well rubbed into the affected area night and morning. The drug appears to act both as a stimulant and a parasiticide, and the method of cure was for the diseased patch to become broken up into a number of smaller patches, with sound skin intervening. These smaller patches became again broken up till they disappeared altogether, and in their place was left a red blush, as if the part had been struck a smart tap with a cane. This redness, however, only remained for a day or two. The two cases of tinea tonsurans were the most stubborn to give way, but even in their cases more frequent applications, and continuing the treatment over a longer period, brought about the result desired, and that, too, without resorting to epilation.

An Enema for the Convulsions of Children.—*Nouveaux Remèdes* attributes the following formula to Dr. J. Simon:

Musk .	grs. iij.
Camphor . .	grs. xv.
Chloral hydrate	grs. vij.
The yolk of one egg;	
Distilled water .	℥ iv.

The rectum is to be emptied by a simple enema before this is injected.—*N. Y. Med. Jour.*

Treatment of Chorea.—Descroizilles prescribes as follows:

℞.—Zinci valerian.
Ext. hyoscyami,
Bismuth. subnitrat. āā gr. 15. M.
Divide in pill 30 in number.

Sig.—From 3 to 6 pills daily.—*Journal de Médecine de Paris*, May 23, 1887.—*Med. News.*

Remedy for Itching Piles.—The *Chicago Medical Times* gives the following:

℞.—Tinct. capsicum,	1 part.
Spts. turpentine,	2 parts.
Spts. camphor,	3 "
Deoolorized iodine	3 " —M.

Inflammatory Stricture of the Male Urethra.—Dr. John Blake White concludes an elaborate paper on

this subject (*Journal of Cutaneous and Genito-Urinary Diseases*, June, 1887) as follows:

1. That congestive stricture is a symptomatic affection, and ought never to be regarded or treated as an independent condition.

2. It is always associated with a spasmodic or permanent stricture, or some other urethral, vesical, or renal irritation.

3. If a complication of spasmodic stricture, it need not necessarily result in an organic stricture, if it receives skillful attention.

4. If a complication of organic stricture, relapses are sure to recur unless the true stricture is removed by operation.

5. A very contracted meatus urinarius is alone sufficient to cause urethral inflammation by reflex irritation, and when such a condition obtains, permanent relief cannot be expected without complete division of the orifice.

Class Room Notes.—In a case of *albuminuria*, probably due to chronic parenchymatous nephritis, Prof. Bartholow prescribed the following: Trinitrin, gtt. j every four hours, up to tolerance; tinct. ferri chloridi, gtt. xv four times a day; also "cream-of-tartar" lemonade, made by adding ℥j of cream tartar to Oj water, with sufficient lemon and sugar.

In *constipation* occurring in the thin and anæmic, the efficacy of sulphate of magnesium can be much increased by the addition of gr. j--ij of sulphate of iron, taken before breakfast each morning. However, if the patient be of full health, robust and plethoric, you can add to the Epsom salts with much advantage gr. $\frac{1}{16}$-$\frac{1}{12}$ of tartar emetic.

For *thread-worms*, at night give gr. j of calomel and gr. ij--iv of santonin; the following morning inject a cleansing enema of water, and follow this by the infusion of quassia. To destroy the ova hidden in the folds of the anus and adjoining parts, apply locally a one per cent. solution of carbolic acid by sponge; never use the acid as an injection, however.

Prof. Bartholow speaks quite highly of iodide of ethyl for *asthma*. It should be inhaled from a bottle, being vaporized by the heat of the hand, the patient breathing strongly and deeply; this should be continued each sitting until a hot, stuffy sensation is experienced in the chest. At times it may cause coughing. Asthmatics should, as a rule, take a light supper, to avert the attack which is usually nocturnal.—*From College and Clinical Record*, July 1, 1887.

Local Revulsive Action of Iodine.—If a piece of absorbent cotton wet with tincture of iodine be held in contact with the skin, any desired amount of revulsive effect may be obtained, even to blistering or the formation of an eschar.—*La Normandie Médicale.*—*Med. Times.*

Treatment of Flatulent Dyspepsia.—Huchard recommends the following formulæ:

Salicylate of bismuth	2 parts.
Calcined magnesia	2 "
Powdered willow charcoal	3 "
Oil of anise.	1 part.

Of this powder a small teaspoonful may be taken an hour or a half hour before a meal. When gastralgia is added to flatulent dyspepsia, he recommends the following:

Syrup of peppermint	250 parts.
Hydrochloric acid	1 part.
Hydrochlorate of cocaine	$\frac{1}{10}$ part.

of which a small glass (such as those in which liqueurs are served) may be taken after a meal.—*Revue Générale de Clinique et de Thérapeutique*, May 19, 1887.

Dr. Morell Mackenzie shares the honors in London with Buck Taylor, the cowboy. Fame is the same, whether acquired by removing tumors from the throat of a prince, or manipulating the fiery steed in the circus arena.—*Weekly Medical Review.*

Medical Items.

Professor Billroth continues to improve in physical condition.

Dr. R. J. Levis, of Philadelphia, has been elected President of the Pennsylvania State Medical Society for the ensuing year.

Dr. John S. Kinser, a graduate of the University of Maryland, class of 1884, died in Littlestown, Pa., a few days ago.

The degree of Ph.D. was conferred upon Dr. James E. Pilcher, U. S. Army, by the Illinois Wesleyan University at its last commencement.

Dr. Morell Mackenzie has performed another operation upon the Crown Prince and Prof. Virchow reports that the excised piece is an innocent growth.

Dr. C. F. Bellerman, a graduate of the University of Maryland, class of 1873, died at his residence in this city last week. Dr. Bellerman was a skillful pharmaceutist and chemist. He was 39 years of age.

A medical college has been organized in Denver, Colorado, and named the Gross Medical College. It is the Medical Department of the Rocky Mountain University. The first term begins September 21st and lasts seven months.

There are now said to be over seven hundred medical journals published in the different parts of the world. The number is still increasing. Louisville, Ky., publishes a larger number of medical journals than any other city in the world in proportion to population.

Physicians Have the Right of Way.—The chief of police of Chicago has issued an order giving the vehicles of physicians precedence at bridges, along with the mail and patrol wagons, ambulances, and fire-apparatus.—*Med. Rec.*

Dr. Joseph Jones, of New Orleans, introduced at the recent meeting of the Louisiana State Medical Society a resolution calling upon the Legislature to repeal the law of 1885 excluding all medical students from competition for the position of resident students of the Charity Hospital, except native and residents of Louisiana.

Dr. S. H. Henry a well-known and highly respected physician died at his residence in this city on July 12th at the age of 69 years. Dr. Henry practiced his profession for a number of years in Howard County, Maryland, and has only resided in this city during the past few years.

Terrier reported, at a recent meeting of the French Society of Surgery, two cases of nephrectomy in which he sutured both layers of the peritoneum to the anterior abdominal incision; the pocket formed by the removal of the kidney was thus drained anteriorly. He prefers the abdominal incision in large tumors projecting anteriorly.

At a recent meeting of the Society of International Statisticians, held at Rome, M. Vacher showed a diminution in the world's death-rate, as shown by the statistics of different lands. Taking France as an example, a mortality rate of 34 per cent. in 1770 became 24 per cent. in 1880; in Sweden 28 per cent. in 1760 was reduced to 17 per cent. in 1880.

M. Bordio reported a steadily diminishing death-rate for Italy, since 1876: the result of improved drainage of marsh lands, and advances in national hygiene.—*Med. News.*

The number of persons treated at the Pasteur Institute in the month of March, 1887, was as follows: French and Algerians, 121; foreigners, 50; total, 171. In 28 cases, the fact that the disease was rabies was established by the inoculation of medulla, or by the development of hydrophobia in persons bitten at the same time. It was proved by veterinary observation in 115 cases. In 28 of the cases the patient had been bitten by animals only suspected of rabies. A man named Sans, who was bitten by a mad wolf, and cauterised fourteen hours later, died during treatment.—*Brit. Med. Jour.*

At a recent meeting of the Société Médicale des Hôpitaux, M. Gouguenheim described the results obtained by M. Ehring by his surgical treatment of tubercular laryngitis. This consists in scraping and cleaning the ulcerations, or, when this is impracticable, in making lactic acid or iodoform injections under the laryngeal mucous membrane after the application of cocaine. Of 200 patients thus treated last year, 28 were cured. M. Gouguenheim showed specimens which proved that tubercular ulcers had been cured. The nature of the disease was established by the presence of the characteristics bacillus in the microscopic preparation which had been examined by Professor Virchow. M. Labbé said these statements embodied facts of an extraordinary nature, which could not be accepted without reserve.—*Brit. Med. Jour.*

The announcement made in the general session of the A. M. A. at the last meeting in Chicago by Dr. N. S. Davis, to the effect that the books and instruments of the eminent scientist, Dr. J. S. Jewell (recently deceased), of Chicago, were on sale at a neighboring book store, and the purchase on the part of members would be of great aid to his wife and children, was a sad commentary upon the error of a slavish and absorbing devotion to the scientific part of the medical profession at the expense of money, family, health and life itself. A man's first duty is to his family; this being the case the query may well be made as to whether the physician, the soldier or the clergyman should be permitted to marry.—*Weekly Medical Review.*

Original Articles.

ENLARGED THYROID OR GOITRE, A CAUSE OF TRANSVERSE PRESENTATION.*

BY CHARLES CALDWELL, M.D., OF CHICAGO.

June 1st, 1884, Mr. G—— summoned me to attend his wife. On the way to his house he informed me that she was in labor; that a midwife was in attendance and had been for twenty-four hours; that his wife did not seem to be making any headway, but was becoming weak and exhausted, and the midwife was frightened, not knowing what was the cause of the delay or what to do.

Her condition upon my entrance was truly frightful. She was in the midst of a labor pain, pulling the midwife's hands, straining every muscle, her whole face cyanotic, and her eyes protruding as if they would escape from their sockets. Exhausted she fell back gasping for breath.

It required but a single glance to perceive that death threatened this poor woman from two sources, *i. e.*, asphyxia and rupture of the uterus.

Bimanual examination revealed the fœtus in a transverse presentation. The os was fully dilated and the membranes had ruptured. The mother had not felt the movements of the fœtus for several hours and its heart sounds could not be heard.

Podalic version was performed without delay, by Braxton-Hicks' method. The feet were brought down, and during the next labor pain the second stage was completed. The third stage consumed but a few minutes and the uterus contracted well. The fœtus was large, but showed no signs of life. The heart's action had probably ceased several hour before.

After visiting my patient for three succeeding days, during which time her pulse and temperature remained normal, I saw no more of her, but her husband, whom I met the following week, informed me that she got up the fourth day and attended to her usual household duties.

Oct. 16, 1885, I was called a second time to attend to Mrs. G—— in labor, and as in the first instance, she had called a midwife, also as before, she had been under her tender care, or rather at her tender mercy, for twenty-four hours. Again the fœtus was in a transverse presentation with the right arm and prolapsed cord protruding from the vulvar orifice, for the membranes had ruptured. The cord was pulseless. The hand and arm were easily pushed up over the face and above the brim of the pelvis.

By combined manipulation, with the right hand in the vagina and the left over abdomen, cephalic version was performed, the head was brought down into the first position and held there until by a strong labor pain it became engaged, when forceps were applied at the superior strait and the fœtus extracted during the next pain.

This fœtus was an unusually large one, and I regret it was never weighed. Dr. Jaggard, who utilized it for the cause of obstetric science, says it must have weighed nearly or quite 20 lbs. Her puerperium was normal as before, which means she left her bed the fourth day.

February 18, 1887, Mr. G——, for the third, and, I hope, the last time, summoned me and said his wife needed my services again; that this time they had decided not to call a midwife first, but to send for me at once and give me a better opportunity to save the child's life. Examination revealed a third case of transverse presentation. Os was fully dilated, but membranes unruptured. Through the membrane, by vagina, could be felt both feet and hands. The head was to the right and the breech to the left. Fœtus was in dorso-posterior position. The placenta could be easily felt through the abdominal walls, and was attached to the anterior wall of the uterus, near the fundus. By external manipulation, I attempted to perform cephalic version before the membranes ruptured. The amniotic fluid was small in quantity, and I failed. Deciding upon podalic version, the membranes were ruptured, and a fœtus weighing

*Read before the Chicago Gynæcological Society.

twelve pounds was delivered in a few minutes, but not without considerable muscular exertion on the mother's part as well as on my own.

As I brought down the feet with the right hand and pushed up the head with the left, the abdomen of the fœtus rotated anteriorly. As soon as the body was delivered I clasped the thorax of the fœtus with the left hand to prevent inspiration and asphyxia. The arms were then brought down, and with the assistance of the nurse, who raised the child's body up over the mother's abdomen, I seized the fœtus by the occiput and delivered the after-coming head without forceps. The child gasped a few times, and then began to cry, to the delight of its mother. Placenta was soon expelled and the uterus contracted firmly and well.

Puerperium as in the two preceeding cases.

The patient who furnishes me with my theme was born at Königsberg, Germany, in 1852; was married in 1873, and is the mother of ten children.

The oldest four were born in Germany—the others in America, during the last nine years. Her first seven confinements were normal, and she was attended by a midwife. Seven years ago the left lobe of the thyroid gland began to enlarge during gestation, but caused neither pain nor dyspnœa. Three years ago, during her eighth pregnancy, the right lobe began to enlarge, and increased in size very rapidly, producing both pain and dyspnœa, compelling her to take a semi-recumbent position at night instead of a horizontal one. During the last three months of gestation she sat bolstered up in bed at night. This posture, which she was obliged to take whenever she sat down, during the day as well as the night, produced a continued pressure on the fundus of the uterus, changing its long axis from vertical to an oblique or transverse direction. Of course, the long axis of the fœtus must coincide with that of the uterus, and the continued pressure on the breech or head, according to the end of the fœtal ovoid at the fundus, would force it into an oblique or transverse position, and also throw the lower end of the fœtus out of the pelvis and above its brim. The same position of the mother is maintained during labor as during the last three months of pregnancy, hence the fœtus remains in the same oblique or transverse position, and the lower end of the fœtal ovoid cannot descend below the pelvic brim.

A NEW COLPOPLASTIC OPERATION FOR DEFECT OF THE VAGINA.*

BY CHRISTIAN FENGER, M.D., OF CHICAGO.

When I saw the patient the external genitals were normal, and immediately inside of the labia minora there was a cicatricial mass a little funnel-shaped, and in the centre of it an opening through which only a very fine probe would pass. An examination of the rectum showed about three inches inside of the external genitals, a tumor which I believed was the uterus, but when I came to operate I found it to be a sac filled with blood and mucus—a sac the size of a hen's egg, and behind that a small uterus. This dilated sac was at the upper portion of the vagina, and the lower two and a half to three inches of the vagina was a cicatricial mass. I made the usual operation recommended under these circumstances; dilatation with partial excision of the cicatricial tissue; dilatation with blunt instruments between the rectum and bladder. In that way we can get a space of any size without much trouble, a space large enough for a child to pass through, but we know that it is very difficult to keep such an artificial vagina from retracting. In this case as soon as the glass plug was left out for a few days, the vagina retracted so as to barely permit the passage of the finger. It is natural that here, as in other places on the body, we should want a covering of skin and mucous membrane to keep such a channel open. Attempts in this respect have been made, though not very commonly.

*Read before the Chicago Gynæcological Society 7 April, 1887.

Hepner, of St. Petersburgh, in 1872, proposed to operate for abscess of the vagina, at the same time dislodging the menstrual blood accumulated, then planting in a flap from the peritoneum. The posterior lines of the H were prolonged so as to loosen the flap sufficiently to put it some distance into the artificial vagina. Credé, in 1883, had evidently not seen this article. Nobody seems to have imitated or adopted this method, because Credé describes a method of operating in an obstinate case that had been operated upon over and over again with usual dilatation method, and in which the vagina always retracted so as to cause the patient great incovenience in her menstruation. He operated by dilating the vagina as usual; then he took a flap consisting of one labium majus, leaving the labia minora, and planted that in the posterior surface of this new vagina. He states that the hairs on this labium majus did not cause any inconvenience. It was an elderly lady, over fifty years of age, where marriage was out of the question; she only wanted relief from her menstrual troubles. In this case I thought it would be better to use the labia minora for a flap on each side. The labium minus, when reasonably well developed, being capable of folding and unfolding, and consequently the flap acquires the diameter of such labia minora. By unfolding them we get one inch more. By loosening the labia minora on the sides, leaving them in connection with the skin at the posterior sides of the entrance to the vagina, and then unfolding them, I got a flap three inches long and an inch in diameter, although this labium minus looked very thin, almost transparent, so that I thought it would die off when planted in. It did not have the advantage of being mucous membrane, but was without hairs. The result was that both of the flaps healed. I have the patient here so that the Fellows of the Society can see that the vagina is almost perfect. The loss of substance caused by taking the flap is very easily covered by drawing together all the skin. It is very movable, so that there is really no loss of substance. A flap of skin an inch and a half broad is very easily covered by drawing the neighboring skin together. So far as after treatment is concerned, there has been no difficulty. In the beginning the vagina was packed with iodoform gauze, and later glass plugs were introduced.

Selected Article.

OBSERVATIONS ON THE SALICYL TREATMENT OF ACUTE RHEUMATISM*

BY ALFRED H. CARTER, M.D., LOND.,

Physician to the Queen's Hospital, Birmingham.

Everyone who attempts to arrive at a definite verdict with regard to the efficacy of a medicinal remedy for a given disease must necessarily find himself confronted with difficulties of many kinds; difficulties in accumulation of sufficient material; difficulties in securing uniformity of conditions; difficulties in connection with the ever-varying progress and development of the disorder under consideration; difficulties in grasping and appreciating properly a complex assemblage of symptoms; and, last but not least, difficulties in exhibiting that mental serenity, accuracy of perception, and judicial impartiality which alone can guide the observer to a right interpretation of his impressions.

With a full regard for these difficulties, I think that we are now, nevertheless, in a position to speak with very considerable confidence as to the merits of the salicyl compounds in the treatment of acute rheumatism. The method has been before the profession for upwards of ten years, and opportunities of observing its effects are almost of daily occurrence. Moreover, the tests of its action are exceptionally simple and clear, namely, the relief of the pain, the reduction of the fever, and the influence on the duration of the disease. There is almost a universal consensus of opinion that, judged by these tests the treatment of acute rheumatism by the salicyl

*From *British Medical Journal*, June 25, 1887.

compounds is superior to any other method which has been as yet introduced. As to the relief of pain and the reduction of fever there can be no question whatever; but as to the influence of the drug in shortening the duration of the rheumatic process, pure and simple, there is not as yet complete unanimity. For my own part, I hold a very strong opinion in the negative as regards this last point.

At the same time, it is pretty generally admitted that the good effects of the drug are by no means equally manifested in all cases, and in some it appears to fail altogether. Some observers have been so impressed with the instances in which the action has been unsatisfactory that they have at once rashly concluded that the salicyl compounds are very much over-rated drugs as remedies for this disorder, and that they cannot be relied upon. But, bearing in mind the marvellous relief which follows their use in the majority of cases, it would surely be more logical to attribute the disappointing results to the operation of some exceptional modifying condition, the nature of which should be carefully searched out, in the hope that we might be able to distinguish beforehand those cases in which the remedy will succeed from those in which it will fail. Inquiries are repeatedly being made in the columns of our medical journals for guiding indications in the use of the salicyl compounds for this disorder, and the object of this paper is to attempt to define with sharper outlines and greater precision the relation and scope of this method of treatment, so far as my own observations and experience enable me.

In the first place, it is important to frame a good working hypothesis as to the nature of the rheumatic process. I use the term "working hypothesis" advisedly, for the subject is too complex and difficult to admit of absolute demonstration in the present state of our knowledge; and it is thus quite scientific to accept the hypothesis which covers the largest number of known facts with regard to the matter under consideration. The prevailing views of the nature of the rheumatic process are four in number: 1. That it is due to the accumulation in the system of certain products of tissue-change — probably of an acid nature—by interference with their elimination as the result of cold; this is, broadly speaking, the humoral theory. 2. That it is due to cold acting directly or indirectly upon the vaso-motor or trophic nerves of the joints, and so exciting inflammation in them; this is the neurosal theory. 3. That it is due to the operation of microbes, in a manner closely analogous to what occurs in malarial fevers; this is the miasmatic theory. 4. That, under the influence of cold, operating through the medium of the nervous system, a disturbance occurs in the metabolism of the tissues, leading to the formation and accumulation in the blood of abnormal substances, on which the outward manifestation of the disease depend; this may be termed the neuro-humoral theory, inasmuch as it combines elements of both the humoral and neurosal teaching. I assume that in all these theories, except perhaps the miasmatic, a special inherited predisposition would be regarded as a necessary factor in the evolution of the actual disease.

I shall refrain from enumerating the argument for and against each of these views, and shall merely state that I give my adhesion unhesitatingly to the last, or neuro-humoral theory. I cannot pretend to say whether the incidence of the disturbing influence is general or partial in its distribution; but the important fact to remember, as it seems to me, is that as a result of the nutritive disturbance, abnormal substances are formed and accumulate in the blood, and that to the secondary effects of this offending material most of the striking outward phenomena of rheumatic fever are due. Dr. Latham, in an extremely elaborate and able series of papers published in the Journal in April, 1886, brings forward very cogent evidence to show that glycocine is the most important of these abnormal substances; and I am convinced that, though he may be in error on some points of detail the principle is correct so far as one can test it by clinical observation.

I propose briefly to consider the bearing of this doctrine upon the joint affection, so far as may be necessary to elucidate the principles of treatment. The synovial sacs are known to be in direct communication with the vessels of the absorbent system, and it is a matter of general clinical experience that the joint cavities tend to become involved in serious toxic conditions of the blood, as in pyæmia, for instance. The liability to joint-inflammation in rheumatic toxæmia is, therefore, by no means surprising. The nature of the mischief which is set up is that of simple inflammation caused by irritation from abnormal chemical ingredients in the synovia or lymph-fluid which bathes the articular surface. It is identical in every respect with such inflammation as would be set up by the presence of any ordinary irritant in the joint-cavity. As a rule it is slight and fleeting, affecting only the more superficial parts, and not extending to the cartilaginous and fibrous structures around. If, on the other hand, the irritation be very severe, frequently recurrent, or of long duration, then greater damage is inflicted upon the joint, which undergoes more or less considerable structural change. We arrive, then, at the following conclusions: 1. That the joint-affection is merely an incident in the rheumatic disorder, which might conceivably be wanting altogether without vitiating the nature and reality of the rheumatic process; 2, that it is secondary in its origin; and (3) that the changes which take place in the joint-structure have no special feature belonging to them which serves to distinguish them from any other kind of simple arthritis.

The primary chemical change in the blood to which I have referred as the necessary etiological antecedent of the joint-affection also leads to secondary changes in the blood itself, of which perhaps, the most important is a rapid destruction of the red-corpuscles. By careful hæmacytometric observations, I have found that the proportion is often reduced to nearly a half of the normal amount, that the destruction continues until the temperature begins to fall, and then, after a variable interval, the number begin to increase again. No one can fail to have noted the rapid development of anæmia in acute rheumatism, and the marked pallor which, as a rule, accompanies the chronic variety. The fact, however, is scarcely mentioned in most text-books, and yet it has an important bearing in many directions.

Apart from the anæmia and the various troubles directly dependent upon it, there are at least two phenomena on which this corpusclar destruction throws much light. First, the highly pigmented condition of the urine which is due to the liberation of a large amount of hæmoglobin; and, secondly, the excessive coagulability of the blood, which is due to the liberation of certain fibrin-factors. Moreover, such a destructive change as this must of necessity load the blood with extractive matters, and in many other ways, impossible exactly to identify in detail, greatly disturb its chemical composition—facts which, taken together with the primary toxæmia, go far, in my opinion to account for the occurrence of endocarditis and possibly also the phenomena of hyperpyrexia. Interesting and suggestive as these pathological conditions are, I cannot now follow them further, but hasten again to take up the therapeutic thread which has been temporarily dropped.

The first question to be answered is this: On what principle do the sylicyl compounds produce their effect? If it be true that there is nothing of a specific nature in the joint inflammation; if it be true that acute rheumatism is at the bottom a metabolic distubance attended with chemical alteration of the blood; and if it be true that the joint affection is but the direct outcome of chemical irritation, then it appears to me that there are only three possible hypotheses which can be suggested as the way in which the remedy acts: (1) That the drug directly allays the joint inflammation; (2) that it strikes at the root of the morbid process as such; and (3) that it in some way neutralises and prevents the chemical irritation of the joint. Now we do not find that the salicyl compounds have

any influence on arthritis which is unconnected with rheumatism or the disorders allied to it, so I cannot accept the first view. Then, against the next alternative, we see that, however much the drug relieves the pain and reduces the fever, the rheumatic condition returns immediately the remedy is suspended, a fact which irresistibly suggests that the drug operates by checking the outward manifestations rather than by curing it at the seat of origin. We are thus driven by process of exclusion to the third hypothesis, namely, that the salicylates act by neutralising and preventing the chemical irritation of the joint. This, too, is the view which, as we shall find, covers known clinical facts best.

Dr. Latham, in the lectures already referred to, not only brings forward a mass of strong evidence in support of this doctrine, but is further able to suggest the probable nature of the chemical action of the salicyl compounds. Without entering into the clinical details with which his paper abounds, his view is that whatever salicyl compound is given, salicylic acid is set free in the system, which combines in the blood with glycocine and uric acid or their immediate antecedents, and so prevents all secondary manifestations traceable to this source.

We are now in a position to consider the circumstances under which these remedies are alleged to fail. Probably the most common source of failure consists in a faulty mode of administration. Either the drug is not given in sufficiently large doses nor at sufficiently short intervals. For a young adult, in a case of average severity, the dose should not be less than 20 grains, nor should the intervals between them exceed three hours. In cases of unusual severity, the dose should be repeated every two hours. Of course, it is not necessary to maintain this high dosage. As soon as the symptoms begin to yield, the quantity should be gradually diminished. If the drug be pure we need not fear its toxic effects. When they occur they are seldom alarming, and in any case quickly disappear on reducing the dose or temporarily suspending the drug. There seems good reason for believing that toxic symptoms are less liable to occur when these compounds are derived from willow-bark than when (as is most usual) they are prepared synthetically.

Failure in many cases may be explained by the fact that inflammatory changes have been set up in the joint which are too severe and deep seated to subside immediately on the removal of the primary irritation. The salicylates remove the latter, but have no direct influence over the imflammatory change in the joint. Thus, we find that the salicyl compounds always answer best in the early stages of the disease, before the joint mischief has had time to make any headway. The longer the treatment is deferred after the invasion of the disease the more disappointing are its results, other things being equal. Then, again, the treatment is always more satisfactory in first attacks than in subsequent ones, and this in direct proportion to the frequency of recurrence and the shortness of the intervals between consecutive attacks. Precisely similar arguments apply to cases of subacute and chronic rheumatism. In these instances it is not that the salicylates act otherwise than in early acute attacks; but, while in the latter the joint-inflammation, though sharp, is short, and quickly sudsides on removal of the primary source of irritation, in the former, structural changes of an inflammatory origin have taken place which give rise to persistent pain, beyond the reach of salicyl influence, requiring time and careful local treatment to regain their normal condition.

A third important source of alleged failure is to be found in the association with the rheumatic condition, of more or less grave deterioration of the general health, with nervous debility and depression. It will be more convenient, however, to defer the consideration of this matter until the question of relapse has been discussed. No more frequent charge is brought against the value of the salicylates as a remedy for rheumatism than the indubitable tendency for

the symptoms to return as soon as the drug is suspended.

I would explain the relation of the salicyl treatment to relapses in the following way: The cases treated by the expectant method show clearly that acute rheumatism tends to subside spontaneously after an average duration of about three weeks. As a rule, the more frequently the attacks recur, the longer their average duration, until they merge into chronic rheumatism. Now, it has already been shown that the salicylate treatment has no direct effect on the rheumatic process, but produces its influence by chemically repressing or preventing some of its earliest secondary manifestations.

Accordingly, if the drug be suspended during the early days of the fever, relapse is practically certain; later on, relapse is less likely to occur, until at last, when the metabolic disorder which constitutes the essence of the rheumatic process has naturally subsided, relapses do not occur at all. Applying these facts to actual practice, it is necessary to continue the use of the drug, in reduced doses, for at least three weeks from the date of onset, and even then, on the slightest return of symptoms, to recommence its administration, and to continue it at least for another week or ten days. In this light, so far from the occurrence of relapses depreciating the practical value of the drug, they show up the specificity and certainty of its operation, within its own limits of activity, in a most striking manner.

To return to the infiuence ot debility as accounting for failure of the salicylates in certain cases. It is well known that a common cold lasts longer, and is thrown off with greater difficulty in proportion to the want of vigor and robustness in the person affected, other things being equal. It is precisely the same in acute rheumatism. In proportion as the patient is debilitated and in feeble general health at the onset of a rheumatic attack, the greater the difficulty in reacting from the disturbance which has been set up, the more tedious its progress, and the less complete the recovery. The rheumatic process once started in a weakly subject is certain to be much more protracted than usual, and sometimes exceedingly so. Hence it follows that,under these circumstances, the salicyl treatment would have to be continued much longer than usual in order to prevent relapse. But there are practical difficulties in carrying this out owing to the toxic and debilitating effect of the drug given in full doses, at short intervals, and for a long period. Thus, it can readily be seen why the results of salicyl treatment in such cases are so unsatisfactory. The dilemma is this: either the drug is suspended before the rheumatic process is over, in which cases relapses will certainly occur, or it is continued so long as to depress the vitality of the patient, and make it almost impossible for him to throw off the disorder.

With reference to heart complications I believe that they occupy exactly the same secondary relation to the chemical changes in the blood as does the joint-affection. Consequently, in the same manner as the joint-inflammation can be prevented by early aud vigorous salicyl treatment, so I believe that cardiac inflammation may be prevented. I have never yet seen cardiac complications occur after the first twenty-four hours of salicyl treatment in a case which was known to be uncomplicated at the outset, and in which it was clear, from the rapid diminution of the joint-pains and fever, that the patient was properly under the influence of the drug. When such complications occur during the first day of treatment, it is probable that the inflammation had already begun when the patient first came under observation; and, as with the joint-inflammation, the salicylates have no direct influence of any kind on the inflammatory mischief *per se*.

I venture to hope that these observations, if carefully followed up, will do some little to place one of the most valuable therapeutic discoveries of modern times on a more rational and solid foundation, and enable us to employ the method more intelligently and with greater promise of success.

Society Reports.

PHILADELPHIA CLINICAL SOCIETY.

STATED MEETING HELD JUNE 24, 1887.

The President, JAMES B. WALKER, M.D., in the chair.

Dr. Amy S. Barton read a paper entitled

CLINICAL SYMPTOMS OF ERRORS OF REFRACTION.

Referring to the statistics of Wills' Eye Hospital for five years, I find that, of the 33,329 patients applying for relief, 8,109 presented themselves for the correction of error of refraction. Of these 4,015 were hypermetropic, 1,088 myopic, and 3,006 astigmatic. A large majority of astigmatic cases being of the hypermetropic form. The symptoms, of which these patients complain vary with the form and degree of refraction errors and with the sensitiveness of the patient.

Some hypermetropes speak of a dull, heavy aching, or a sharp pain in the eyeballs, while others are not troubled with any local pain, or defective vision, but complained of a persistent headache which has resisted all ordinary treatment. These headaches are usually in the temporal and frontal regions, often constant, and aggravated by use of eyes for near work; also by walking or riding in crowded streets, or looking from a railway car; in fact by mingling with a crowd anywhere. These symptoms may date from childhood, or they may have first appeared after some exhausting disease; anything which lowers the muscular and nervous tone. Others have not a constant pain, but are subject to paroxysms of sick headache, in which the pain assumes a nervous type and is associated with nausea and dizziness, these attacks being precipitated by the same causes previously spoken of and by fatigue. These headaches resemble, somewhat, those which result from a disordered stomach, but may generally be distinguished from them by the exciting causes. Perfect vision is not incompatible with a moderately high grade of hypermetropia, if the patient be young and in good health; but in grades the distant vision falls below the normal and the near vision is imperfect, sometimes producing a spasm of the ciliary muscle, which gives rise to an intermittent blurring of the page when reading, etc. This necessitates a momentary rest of the eyes, after which the letters stand out clear and distinct, until another spasm occurs, which is again relieved by closing the eyes, for a moment as before. Children frequently speak of this. The symptoms of which myopes complain are, pain in the eyeball proper, and indistinct vision, with, in some cases, dizziness, which is probably due to retinal irritation. If the grade of myopia be very high the near vision is also imperfect.

The clinical symptoms of astigmatism are: A combination of those enumerated, with a preponderance of the nervous phenomena. That these troubles are the result of refraction errors is proven by the relief which follows an accurate estimation and correction by suitable lenses. The relation of cause and effect is made more clear by a brief allusion to the conditions which give rise to the various forms of refraction errors. The hypermetropic eye is one in which the antero-posterior diameter is relatively too short for the focal length of its refracting mediæ. The result is, that parallel rays are not brought to a focus upon the retina, and therefore produce blurred images and indistinct vision. If the degree of hypermetropia be not too great, the defect can be overcome by the action of the ciliary muscle. According to Landolt, this muscle is situated in and beneath the ciliary body. It takes its origin in the tissue of the choroid, and is inserted in the border of the canal of Schlemm, which forms the fixed point when the muscle contracts. By its contraction the ciliary muscle causes the ciliary body to advance; the tronule of Trinn, which is attached to the ciliary body, is relaxed, and the crystalline lens, which had been more or less flattened by the tension of the tronule of Trinn,

is left to its own elasticity and assumes more nearly the form of a sphere. It is the anterior surface of the lens which is principally affected by this change, becoming more convex; the posterior surface, incased in the vitreous humor, preserves its form almost unaltered. In this manner the lens adds to itself so to speak, a positive meniscus, which has the same effect as a convex glass placed in front of it. That is to say it increases its power of refraction, or in other words shortens its focal length.

As a result the rays of light, coming from the object, are focused upon the retina and clear vision results. So long as this muscular action can be kept up, without irritation, all is well, but there comes a time, sooner or later, when the ciliary muscle gives out, under this continuous strain. In the normal eye this muscle is not called into action, except when the eye is adapted to near objects, the rays from which infringe upon the eye in a divergent direction, consequently there is a period of rest every time the eye is directed to a distant object, from which the rays fall upon it in a practically parallel direction, and are accurately focused upon the retina, without any effort of the eye. The possessor of hypermetropic eyes must submit to one of two evils; indistinct vision, or a tonic contraction of the ciliary muscle.

It is well understood that all tonic muscular action is painful hence the pain in the eye-balls, of which these patients complain. The reflex symptoms can only be explained by reference to the nerve supply of the eye. The ciliary muscle has two sets of nerves, the long and short ciliary.

The long ciliary, two or three in number, are given off from the nasal branch of the ophthalmic nerve, which is the first division of the fifth, and a nerve of sensation only. The ten or twelve, short ciliary nerves, are given off from the lenticular ganglion, which is situated within the orbit and is composed of three roots, one from the nasal branch of the ophthalmic, one form a branch of the third nerve, and one from the cavernous plexus of the sympathetic. It is not therefore, surprising that an irritation of the ciliary muscle should set up reflex symptoms in the parts which are supplied by other branches of these same nerves.

According to Gray, the ophthalmic nerve supplies the eyeball, the lachrymal gland, the mucous membrane of the eye and nose, and the integument and muscles of the eye-brow and forehead. Hence is explained, not only the pain in the frontal region, with which these patients suffer, but also the increased lachrymation and irritation of the conjunctiva, which follow close application of the eyes, often resulting in a chronic congestion of the conjunctiva and eyelids. It is to the short ciliary nerves that we must look for an explanation of the nervous symptoms, the nausea, dizziness, etc., through their connection with the sympathetic.

Here, as elsewhere, in the economy, the amount of pain and nervous disturbance bears very little relation to the real cause of the trouble. A strong healthy individual may be able to overcome a high grade of hypermetropia, or even astigmatism, for many years, with little or no inconvenience; while a delicate, sensitive organization may be rendered miserable by a very low grade of this defect.

In speaking of the symptoms of hypermetropia, I ought, perhaps, to mention convergent strabismus, which, in a large majority of cases, is due to this defect. Donders explains this by the associated action of the muscles of accommodation convergence.

The myopic eye is, anatomically, the reverse of the hypermetropic; in it the antero-posterior diameter is relatively too long for the power of its refracting mediæ, hence its principal focus lies in front of the retina, and only blurred images result from parallel rays. As there is no mechanism, in the eye, by which the crystalline lens can be flattened, and its focal length thereby increased, the myope can only overcome his defect by approximating the object so near the eye that the rays of light emerging, therefrom, will be sufficiently divergent to be focused upon the retina,

This calls for increased convergence of the eyes, by which the internal recti muscles are unduly taxed, and the eye ball is subjected to abnormal pressure by the contraction of these muscles. This gives rise to the pain in the eye-balls of which these patients complain.

MARY WILLITS, M.D.,
Reporting Secretary.

Abstracts and Extracts.

SARCOMA OF THE FEMALE BREAST.—Dr. S. W. Gross, in an exhaustive paper based upon a study of 156 cases, which appears in the July number of *The American Journal of Medical Sciences*, finds that of the varieties of sarcoma, the spindle-celled, which include the fibrous, constitute 68 per cent., the round-celled 27 per cent., and the giant-celled 5 per cent. of all cases.

Of the entire number only 4, or 2.70 per cent., occurred before the sixteenth year, or during the developmental state of the mamma; 67, or 45.27 per cent., appeared between the sixteenth and fortieth years, or at a period when the breast and genitalia are functionally most active; and 77, or 52.02 per cent., after the fortieth year, or during the period of their functional decline. Their etiology is most obscure, since their development is rarely traceable to injury or disease, and is not influenced by hereditary predisposition, while the social state and menstrual irregularities or arrest are surely unimportant agents in their production. Their growth might naturally be expected to be connected with menstruation, pregnancy, or lactation, or with conditions which render the mammary gland more vascular; but the influence of an increased flow of blood to the organ, which has been assumed by certain author, is not confirmed by an analysis of the cases that he has collected. Thus, in only three examples was an increase in bulk witnessed at the menstrual period, while in two the tumor became smaller. In one the rapid growth began during pregnancy, and in two at the menopause.

During their further progress sarcomata continue, as a rule, mobile and free from superficial or deep attachments; the contiguous structures are not invaded by tumor elements; the skin remains natural in color and texture; the subcutaneous veins are not enlarged, the nipple is normal; and the associated lymphatic glands are not contaminated. To these general statements the following exceptions were noted.

They are locally infectious in 14.19 per cent. of all cases. The skin is ulcerated in 18.59 per cent., and discolored in 23 per cent. The superficial veins are enlarged in 15.39 per cent. The nipple is retracted in only 3.25 per cent. The axillary glands are infected in only 1.9 per cent., and their immunity is a valuable sign in the differential diagnosis. A discharge from the nipple occurs in one out of every nine and a half of cystic sarcomata. Pain is met with in 35.71 per cent. of all cases.

Sarcoma in eminently malignant. Thus, of the 92 cases only 1 ran a natural course, it being an example of round-celled tumor of both breasts, that proved fatal, with presumed secondary deposits, in seven months from the first appearance of the disease. The remaining 91 were subjected to the knife. Of these, 32 were well for periods which varied between one month and ten years and nine months; 42 were marked by local recurrence; in 8, not only was there regional production, but metastases were found post-mortem; 3 recurred, with unmistakable evidences of general dissemination; 4 were characterized by metastases, and 2 by presumed metastases, without recurrence. In other words, 64.83 per cent. of these cases were endowed with malignant features.

Of the 53 cases in which the disease recurred locally, in more than one-half, or 57.7 per cent., the return took place in 6 months while after 12 months there were only 13, or 28.8 per cent., and of these there were only 4, or 8.8 per cent., after 2 years. These statements lead to the belief that the chances for the patient are relatively good after the lapse of 2 years, and that the prognosis is all

the more favorable as the period of freedom from signs of local contamination prolongs itself. As the latest date of reproduction was 4 years, it may be assumed that the 12 cases which remained well after the lapse of that time were permanently cured. The average date of recurrence was 10½ months, and the total life of these patients from the first observation of the disease to the final report after the last operation was 7 years and 9 months. The number of recurrences, or operations for recurrence, was 1 in 23 cases, 2 in 13 cases, 3 in 7 cases, 4 in 1 case, 5 in 4 cases, 6 in 2 cases, 7 in 1 case, 12 in 1 case, and 22 in 1 case.

Sarcoma is less infectious locally, but more infectious as regards the general system, than carcinoma. Its more relatively benign character is shown not only by the larger proportion of cures, but also by the fact that the average duration of life, from the first observation of the disease to the date of the last removal after operation, is forty-two months longer; and this contrast becomes the more striking when it is stated that the majority of the sarcomatous patients were still living, and the majority of the carcinomatous subjects were dead.

Not only is this statement true for sarcomata in general, but it holds good for the three varieties, since the average life for round-celled sarcoma is fifty-four months, ninety months for the spindle-celled, and one hundred and eight months for the giant-celled.

The treatment may be summed up in a few words. The entire breast, along with any skin that may be invaded, must be extirpated, especial care being paid to the complete removal of every particle of paramammary fat and the fascia of the pectoral muscle, in which tissues experience shows that recurrence takes place. In the event of repullulation the growths should be freely excised as fast as they appear, as such a practice not only prolongs life, but may bring about a final cure.

THE TREATMENT OF PNEUMONIA IN THE HOSPITAL OF THE UNIVERSITY OF PENNSYLVANIA.—Dr. Pepper reduces the initial high fever in cases of pneumonia in his wards (if, as unfortunately rarely happens, the case has been admitted just after the onset) by antipyrin or by the external use of cold water. It was for this, accompanied with severe pain, that venesection was formerly used; and he still advises its use at this earliest stage if high fever returns promptly after reduction by the above remedies. They will often produce a favorable impression, however, with less risk. Throughout the disease the fever must be carefully watched and often requires to be promptly reduced. Sometimes large doses of quinia—as thirty or forty grains given in two doses at intervals of four hours—will do this; but antipyrin or thallin or antifebrin is so much more prompt and certain that he prefers using one of them, and especially antipyrin, for the occasional control of hyperpyrexia, while giving continuously a moderate amount of quinia, say ten or twelve grains daily. Quinia meets several indications in pneumonia, and he nearly always gives it, adapting the dose to the grade of disease and special conditions of the patient. As the stomach must be very carefully guarded in pneumonia and everything avoided that might irritate it, it is often better to give quinia by the rectum.

He is more in the habit of using aconite than veratrum, but one or the other of these powerful and reliable arterial sedatives should be used during the early days of the attack, given in frequent and moderate doses so as to produce safely their physiological effect by lowering the pulse rate, relaxing the system and aiding in reduction of fever. Later, if the pulse loses force or after the area of the disease has become defined, the indication for arterial sedatives has usually passed.

Not only must care be taken to avoid irritation of the stomach, but in many cases especially in the early stage there is much gastro-hepatic congestion and irritation present, and here it is important to limit ourselves to relieving this by short courses of small doses of calomel with or without soda, using mean-

while quinia by the rectum to control fever. It is especially in these cases that aconite is preferable to veratrum on account of its less tendency to irritate the stomach. After the disease is developed, ammonium carbonate is preferred to stimulate respiration and favor resolution. It is usually given in single emulsion and in doses of five grains every two or three hours for an adult.

The diet must be adapted carefully to the state of the stomach. It should be liquid throughout and for the first two or three days should be very restricted, but after that may be more free and concentrated if well received. It is extremely important that the patient be not allowed to make any exertion. Rigid rest must, indeed, be insisted upon, for pneumonia is one of the diseases in which sudden death is apt to occur from any improper effort, as even of rising to sit upon a commode by the bedside.

The indications for alcoholic stimulants are drawn from the state of the circulation and nervous system. Many cases do well without any stimulus from beginning to end; but on the other hand the signs of cardiac failure or of failure of nervous force call for alcohol, which may be required to be given freely. Of course, it is to be adapted, as to amount and mode of administration, to the state of the stomach. In general a layer of cotton or wool batting stitched inside of the merino undershirt, over the outside of which a layer of oiled silk is placed, is preferable to poultices. The latter must be made skilfully to be pleasant; they must be changed frequently, and unless this changing is done with great care there are both fatigue and risk involved. Of course, the above remarks apply solely to croupous pneumonia.—*Med. News.*

THE REPORT OF THE COMMISSION ON HYDOPHOBIA.—The report of the Commission appointed in April, 1886, by the then President of the Local Government Board to inquire into M. Pasteur's treatment of hydrophobia was presented to Parliament on Tuesday last. It is not a lengthy document, but in a comparatively few paragraphs it affords complete and powerful defence of M. Pasteur's method, and the most crushing reply to his critics yet published. The Commission consisted of Sir James Paget, Sir Joseph Lister, Sir Henry Roscoe, M.P., Richard Quain, Dr. Lauder Brunton, Professor Burdon Sanderson, and Dr. George Fleming, Principal Veterinary Surgeon of the Army, with Mr. Victor Horsley, Professor Superintendent of the Brown Institution, as Secretary.

All attempts to estimate the value of M. Pasteur's method of prophylaxis against rabies necessarily involve the investigation of two propositions, which are distinct though nearly connected; the report of the Commission, therefore, necessarily falls into sections which must be studied in their natural sequence. The great French biologist first claimed that his inoculations were capable of protecting a man or animal from the risk of becoming infected if bitten by a rabid dog; but as the success of this method became noised abroad, he was compelled to attempt to prevent by its use the development of the disease in persons already infected. The first or "protective" treatment has been amply tested, and the Committee is able to report that "it may be deemed certain that M. Pasteur has discovered a method of protection from rabies comparable with that which vaccination affords against infection from small-pox."

The main question of human interest however, is whether the second claim put forward by M. Pasteur, namely, that he had discovered an effective "preventive" treatment capable of preventing the development of the disease in persons bitten by rabid dogs is well grounded. Upon this all-important point the Committee has brought together an amount of evidence which will go far to settle the question, and certainly constitutes the report one of the most important documents yet contributed to the controversy.

The report is founded upon observations made by certain members of the Committee who visited M. Pasteur's laboratory and investigated a series of

his cases, upon the opinions and statistics published by M. Pasteur, and upon experiments made for the Committee by the Secretary, Mr. Victor Horsley. Two rabbits inoculated by the originator of the method were brought back from Paris and kept at the Brown Institution, where, within a week, each developed the peculiar symptoms, of which the most notable is ascending paralysis, described as produced by rabies in those animals. The first step was to prove that this disease was communicable and was really rabies; four rabbits inoculated beneath the dura mater with the spinal cords of the Paris rabbits developed the same symptoms in six or seven days; four dogs similarly treated developed rabies in eight or nine days, and it is important to note that in two the disease took the furious form, while in two the paralysis was an early symptom, and the animals had the disease in the form termed "dumb" rabies. The converse experiment was also performed, and it was found that bites inflicted by dogs found in the streets suffering from furious or dumb rabies produced the paralytic rabies in rabbits; inoculation with the spinal cords of these dogs produced the same result. The only difference to be noted between the disease as produced in rabbits by M. Pasteur's virus and as produced by the virus of ordinary rabid dogs, was that, in the latter case, the period of incubation was longer (17 to 21 days), and that the symptoms also lasted longer (a week instead of three or four days). These differences were in accordance with the statements made by M. Pasteur.

The general result of the earlier experiments made by Mr. Horsley was to confirm the statement that the virus was contained in the spinal cord; that it was rendered more intense by transmission through rabbits; and that it might manifest itself either in the furious form commonly seen in dogs, or in the paralytic form usually observed in rabbits, or in intermediate forms, but that the disease was always the same—always true rabies.

Having thus cleared the ground and proved the correctness of M. Pasteur's preliminary observations, experiments were next made to test the claim that this virus could be so attenuated that it might be inoculated without danger to the animals, and that, when used after the prescribed manner, it afforded protection to dogs against the effects of subseqnent inoculation with rabid virus. Upon this point Mr. Horsley's investigations afforded equally conclusive evidence. Emulsions of the spinal cords of rabbits which had died of rabies were injected subcutaneously into six dogs. The injections began with a cord which had been dried for fourteen days, and were repeated daily, using on each succeeding day a cord which had been dried for one day less, until at last a fresh cord was used. None of these dogs suffered from the injections. These six dogs, two unprotected dogs, and some unprotected rabbits were anæsthetised and bitten by rabid dogs or cats; the unprotected animals all died of rabies, while not one of the protected animals suffered from the disease. Mr. Horsley has thus been able to repeat the successes achieved by M. Pasteur.

In following the logical sequence of the report, we have now reached the point of greatest practical interest, but where unfortunately the evidence becomes less direct and more inferential. The evidence afforded by comparing the mortality in persons who have, with that of those who have not, been treated by the prophylactic method, cannot be expressed in simple numerical terms, because the necessary data are not available with sufficient precision in all cases. In the first place, it is not always possible to ascertain whether the dog which inflicted the bite was really suffering from rabies; in the second place, the probability of infection varies as the bites have been inflicted through clothes or on the bare skin, with the amount of hæmorrhage which occurred at the time, the thoroughness of the local treatment, and with the condition and genus of the animal by which the bite is inflicted. Thus, taking in each case the lowest estimate, the mortality after dog-bites is 5 per cent., while that after wolf-bites is 30 per cent.

Professor Burdon Sanderson, Dr. Lauder Brunton, and Mr. Victor Horsley, who went to Paris in May, 1886, personally investigated the history of 90 patients residing in Paris, Lyons, and St. Etienne, whose names appear consecutively on M. Pasteur's list. Full particulars of all these patients are given in an appendix; they appear to consist of a fair average set of cases; in 31 instances there was no reliable evidence that the dog was rabid, in others the bites were inflicted through the clothes, bnt in 24 the patients had been bitten on naked parts by undoubtedly rabid dogs, and the wounds were not cauterized or treated in any way likely to have prevented the virus. None of these 90 persons have died of hydrophobia. The Committee estimates that 8 would have died if the inoculations had not been practised. This is the most precise evidence obtained by the Committee, but it would be difficult to over-estimate its value, and it is well worthy the great time and pains expended in obtaining it. No previous observers or critics have contributed any evidence of the kind, and it must be held fully to confirm the claims advanced by M. Pasteur. The other statistics given are of a kind with which we are already familiar; taking the whole series of cases inoculated from October, 1885, to December, 1886, and using the lowest mortality ever estimated for untreated cases (5 per cent.), the Committee is of opinion that "making fair allowance for uncertainties, and for questions that cannot now be settled, we believe it sure that, excluding the deaths after bites by rabid wolves, the proportion of deaths in 2,634 persons bitten by other animals was beween 1 and 1.2 per cent., a proportion far lower than the lowest ever estimated among those not submitted to M. Pastuer's treatment, and showing, even on this estimate, the saving of not less than 100 lives."

It is also stated that it has been proved, either by inoculation experiments with their spinal cords or by the occurrence of rabies in animals also bitten, that in the cases of 233 persons bitten the dogs were indubitably rabid, yet only 4 persons died; whereas the Committee estimates that at least 40 would have died if the inoculations had not been performed. Even the cases of the 48 paitents bitten by rabid wolves, of which so much has been made by M. Pasteur's opponents, are made to tell in his favor, for the Committee estimates that if untreated nearly 30 would have died, whereas only 9 actually succumbed. Further, it is stated that during the first three months of this year M. Pasteur had inoculated 509 persons bitten by animals proved to have been rabid either by inoculation or by the deaths of animals bitten, or so certified by veterinary surgeons. Of this number only 2 have died, and one of these had been bitten by a wolf a month before the inoculations were commenced, and died after three days' treatment. "From the evidence of all these facts," the report continues, "we think it certain that the inoculations practised by M. Pasteur on persons bitten by rabid animals have prevented the occurrence of hydrophobia in a large proportion of those who, if they had not been so inoculated, would have died of that disease."

The report also deals with the question, raised mainly by v. Frisch in Vienna and Lutaud in Paris, whether the inoculations of Pasteur may not themselves be responsible for the deaths of some of his patients. The Committee is of opinion that there is no evidence that any deaths have been caused by the first or ordinary method, but that since the "intensive" method has been used deaths have occurred under conditions which have suggested that they were due to the inoculations rather than to the infection from the rabid animal. The case of the man Goffi, an attendant at the Brown Institute, who was bitten on September 4, was placed under M. Pasteur's care on the following day, but died on October 19th from acute ascending (motor) paralysis in St. Thomas's Hospital, rather tends to confirm this fear, for Mr. Horsley has found that he died of hydrophobia. The report favors the assumption that Goffi died of the virus of the

cat by which he was bitten, chiefly on the ground that the period of incubation was longer than would have followed the inoculation of the highest intensity. This statement, however, appears to go near to begging the whole question, for the matter in dispute is the behavior of the "intensive virus" in man, and a most important element is the duration of incubation. The unusual nature of the symptoms also requires explanation, for the suggestion that the cases hitherto described under the term "acute ascending paralysis," or "Landry's paralysis" are in many instances examples of the dumb or paralytic form of rabies in man, rests upon this single observation of Mr. Horsley's, and ignores the fact that a large proportion of such cases recover. That M. Pasteur himself shares to some extent the apprehensions which have been expressed is shown by the fact that he has already modified his intensive method; instead of using a whole series of fourteen cords, from fourteen days to one day old, during the short period of seven days, followed by six other injections on the four following days, again ending with a cord only dried for one day, he now spreads the injections over fifteen days, and the most virulent cord used has been dried for five days.

The practical conclusion at which the Committee has arrived is, that until police regulations of the most stringent kind can be enforced with complete success, there will always be a considerable number of persons who will require treatment by the method of M. Pasteur. During the ten years ending 1885, the annual average of deaths from hydrophobia was 43, and this probably represents a total number of over 800 persons bitten by rabid dogs; it is not possible to say which, among this whole number, are not in danger of hydrophobia. Police regulations applied over the whole of Great Britain would very materially diminish this number, but the Committee is of opinion that to be effective, the regulations must require (1) the destruction of all wandering, ownerless dogs; (2) discouragement of the keeping of useless dogs by taxation or other means; (3) prohibiting importation of dogs from countries where rabies is prevalent, or the imposition of quaratine; (4) compulsory use of muzzles in districts where rabies is prevalent. *Brit. Med. Jour.*, July 2nd, 1887.

A Death Under Chloroform.—The death of a patient while under the influence of chloroform occured last week at University College Hospital. The facts, as stated at the inquest by Mr. Frank Collins, the house-surgeon, were that the deceased, Louisa Peacock, aged 41, was admitted suffering from pleurisy, with effusion on the left side. The chest was punctured on June 20th, but as fluid did not flow it became necessary to repeat the puncture; the patient seemed rather nervous about it, and asked that chloroform should be given to her. Before administration was completed the pulse stopped, and the heart ceased in five seconds. Artificial respiration was performed, and the patient breathed, but the pulse did not return. The fluid was drawn off in order to give her the best chance, and various means of restoration used for an hour and a-half, but without success. A *post-mortem* examination showed the heart to be fatty and empty. Death was attributed to syncope. In reply to a question from the coroner (Dr. Wynn Westcott,) it was stated that the quantity of chloroform administered was about two drachms.—*British Medical Journal.*

Compound Wine of Creasote for Pulmonary Disorders.—The following is prescribed for incipient pulmonary tuberculosis where the temperature is not much above normal:

℞ Creasoti, 13 G.;
Tr. gentianæ, 30 G.;
Spt. vini, 250 G.;
Vini Xerici, q. s. ad fiat 1000 G.
M.

Sig.—Two or three tablespoonfuls to be taken during the day.—*Revue Générale de Clinique et de Thérapeutique.—Med. News.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JULY 23, 1887.

Editorial.

ALBUMEN IN THE URINE OF HEALTHY PERSONS.—For a long time it has been held by many observers that the presence of albumen in the urine was significant of serious renal trouble or confirmatory evidence of acute or chronic Bright's disease. So tenancious has been this opinion in its hold upon the medical mind that the individual whose urine contained albumen has been largely regarded as a doomed victim of an almost hopeless malady. Insurance companies have steered clear of him and his medical advisers and friends have uttered their alarming prognoses. That the individual survives the doleful prophesies made about him is strange to tell, when one considers the fact that many people are made ill by the mere knowledge of the fact that they are believed to have a grave disease. Without wishing to depreciate the important evidence which albumen gives us of organic or even serious functional disease of the kidney, the time has come when the medical profession must take a more conservative view of the significance of albumen in the urine. The fact that albumen is found in the urine of healthy persons is now well-known; the fact that it appears in the urine under varying conditions of exercise, bathing, diet and other transient causes is also well established. Albumen, then, should not to be regarded as the necessary result of kidney disease as has been too much the case with many observers. Its mere presence in the urine, whether in temporary or persistent form must be accounted for on some other hypothesis than the one almost universally assumed, viz.: as a symptom of a kidney lesion. Our knowledge of this subject has been greatly enlightened within the past few years and we evidently begin to occupy a new position with relation to the significance of albuminuria. Facts are not wanting to dispute the correctness of opinions long held which have associated this symptom with a necessary pathological cause. It becomes quite plain in the face of accumulating testimony that the physician, whether acting in the interest of his patient or in the interest of a life insurance company, should not accept albuminuria as the crucial test of kidney disease. The examination must be made more penetrating than this. It should reveal other evidences of renal disease more weighty than the mere existence of albumen. The condition of normal albuminuria has been shown by Professor Grainger Stewart to be not at all uncommon and not difficult to produce. Professor Stewart claims as a result of an analysis of urine of 407 healthy persons that he found that one-third of all healthy people are albuminuric. Of 205 soldiers he found albumen in the urine of 77. Of 74 civilians 10.8 per cent. had albumen. Of 40 pauper children 17.5 per cent. had albumen, whilst of 40 adult paupers about 60 years of age 67.5 per cent. had albumen.

As a result of further investigation Professor Stewart observed that the percentage of albumen was largely increased by diet and by exercise, thus proving conclusively to his mind that albumen is much more common among healthy people than was formerly supposed and that it is normally discharged from the human kidney under varying conditions of health, of bodily exercise and of diet. Some persons may presume to doubt the correctness of Professor Stewart's observations. We will only add that his reputation for careful observation and conscientious statement is not to be

questioned. Professor Stewart's investigations have doubtless been corroborated by more than one of our readers. We doubt whether there are many physicians of large experience as medical examiners or as practitioners who have not come in contact with individuals apparently healthy in every particular whose urine contained albumen which was not to be explained by any theory of renal disease. Whether an examiner is always correct in rejecting this class of applicants for life insurance we are not prepared to admit. In our opinion the test should be more thorough than such evidence as the simple presence of albumen affords. It should be applied for weeks and months, should embrace a study of his habits, diet and general physical health and by exclusion eliminate other symptoms of renal changes. We certainly are not, in the light of modern investigations, justified in assuming that albumen is conclusive evidence *per se* of kidney disease.

The Report of the British Committee on Pasteur's Method.—A committee consisting of Sir James Paget, (chairman), Dr. T. Lauder Brunton, Dr. George Fleming, (veterinarian), Sir Joseph Lister, Dr. Richard Quain, Sir Henry E. Roscoe, Dr. J. Burdon Sanderson, and Mr. Victor Horsley, (secretary), was appointed April, 1886, to investigate M. Pasteur's system, and after a year's careful work laid its report before Parliament on the 27th of June. From the abstract of the report which was published in the *Lancet*, of July 2nd, it appears that the committee endorsed most emphatically the methods pursued in M. Pasteur's laboratory, and the results obtained therefrom. The statistics have been carefully considered, and the conclusion arrived at is that this mode of preventing hydrophobia has already been instrumental in saving life.

With such names as a guarantee the profession should be willing to accept the report of this committee on this subject concerning which there has been such a wide difference of opinion. It is especially gratifying in view of the fact that the criticism that M. Pasteur has met with at the hands of the Germans, and of his own countrymen has evidently been unfair and in many instances clearly spiteful.

Miscellany.

Oxygen Baths in Febrile Conditions.—A spanish observer, Dr. F. Valenzuela, starting from M. Paul Bert's results showing the destructive action exerted by oxygen of high tension on vegetable and micro-organic life, has recently made a number of interesting observations on the power of an atmosphere of pure oxygen to effect the febrile state. He found that the temperature of healthy rabbits, after being kept for an hour in pure oxygen, at pressures of from 760 millimètres to 1,520 millimètres, underwent a marked diminution, amounting in the last case to as much as 11° F. Again, rabbits into which septic matter had been injected so as to induce pyrexia, suffered a decided diminution of the fever by immersion for one or two hours in an atmosphere of pure oxygen. In one experiment, where two rabbits were similarly injected, one which was twice bathed in oxygen at a tension seven times as high as that which it has in the atmosphere recovered, while the other, which was left untreated, died on the third day. Several observations were also made on hospital patients. Two cases of acute pneumonia, treated with oxygen "baths" at a pressure of 960 millimètres, ran a peculiarly rapid and favourable course. In a phthisical case with a temperature of 103.6° F. an oxygen "bath" brought the thermometer down to 101.3°. The next evening the temperature rose as before, and was again reduced in the same manner; slight hæmoptysis, however, was caused by the "bath." The next day there was no rise of temperature. After two days, a third "bath" was given, and from that time the febrile condition appeared to improve, for though the temperature sometimes rose above normal, the pyrexia was never so pronounced as it had been. From a second case of the same kind reported, there would seem to be a decid-

ed danger of these oxygen "baths" producing hæmopytsis. On the temperature, however, they appear to exert a very beneficial effect.—*Brit. Med. Jour.*

The Duration of Menstrual Life.—A few years ago, Dr. Fordyce Barker stated it as the result of his observation that, contrary to the common impression, the menopause was apt to occur early in women who had not menstruated for the first time until they had passed the usual age for the beginning of the menstrual function, and *vice versa*. This view was recently supported to a certain extent by Dr. Rouvier, professor of gynæcology at Beyrout, in a memoir on "Menstruation in the Women of Syria," presented to the Paris *Societe de médecine*, brief mention of which we find in the "Union medicale." Dr. Rouvier has found that, when menstruation begins unusually early, the menopause occurs neither earlier nor later than in the generality of women.—*N. Y. Medical Journal.*

Treatment of Gastralgia.—Gallard advises the following treatment:

Before each meal a drop of this mixture on a lump of sugar.

℞.—Morph. hydrochlorat.	grs. 1½.
Aquæ lauro-cerasi	♏ 75.

At the end of a month replace the morphia by one of the following pills:

℞.—Ferri arseniat.	grs. 1½.
Extr. valerian.	grs. 75.—M.

Ft. pil. 50 in num.

The treatment should be thus alternated month by month. While using the solution a spring-water containing iron should be drunk at meals. While taking the pills wine or carbonated water should be taken.

Two hours after dining a teaspoonful or tablespoonful of the following should be taken:

Potassii bromid.	℥ 2½.
Syr. aurantii cortic	℥ 5.—M

Cold shower-baths, of fifteen seconds, may also be used.—*Les Nouveaux Remédes*, May 8, 1887.—*Med. News.*

Antipyrin in Otalgia Nervosa.—Gomperz, of Vienna, reports good results from his use of antipyrin in doses of from fifteen to twenty-five grains in seven cases of uncomplicated nervous otalgia. One of the cases was double, had persisted more than a month, and was cured by fifteen grains of antipyrin. Another took thirty grains. All were improved.—*Wiener Med. Presse*, May 1, 1887.—*Med. News.*

A Hairpin in an Unusual Situation.—Dr. N. Senn in a letter to the *Journal of American Association* says: Professor Freund related to me the history of a very interesting case that recently came under his observation. A patient was brought into the hospital suffering from all the symptoms of pyosalpinx. Abdominal section was performed, and a careful digital exploration appeared to confirm the diagnosis. On one side of the uterus, corresponding to one of the tubes, a hard, adherent mass was found, which was removed entire with great difficulty, on account of firm universal adhesion, in the separation of which severe hæmorrhage was incurred. After the mass was removed the large cavity was filled with a tampon, and all bleeding arrested by compression and ligature. Section of the mass revealed in its interior a hairpin. This common instrument of destruction had evidently been used to produce abortion, had perforated the uterus, and caused the suppurative parametritis—another sad illustration of the folly of women in attempting limitation of offspring.

Oleum Deelinæ in the Treatment of Eczema.—Recent writers on the treatment of eczema seem not to have noticed or been influenced by a paper in the *Practitioner*, from the pen of Dr. John Roberts, of Chester. He strongly recommends the use of oleum deelinæ, so called on account of its being manufactured by the Dee Oil Company. This is a clear inodorous oil, not unpleasant to use, and very easily absorbed. I have used it in a large number of cases, with far better results than from any other method of treatment. It is of most use

in cases of papular eczema, or in the vesicular type of the disease, if there be not co-existent too much erythema and inflammation. Used as by Dr. Roberts, uncombined with other oils, I have sometimes found it irritating, but by mixture with equal parts of castor-oil, this objection has been obviated, and the utility of the oil was not interfered with.

The following cases are fair examples of many in which the use of oleum deelinæ effected a cure after other remedies had been used without success.

J. A., Aged 66, a retired publican, suffered from gouty eczma of the papular type on the back and arms. He had been for twelve months continuously under medical treatment, without improvement in his eczema. He suffere d horribly from itching, was unable to tleep, and become irritable and nervous. He was ordered alkalies internally, and to use rags soaked in oleum deelinæ and oleum olivæ)1 in 4). In twelve days he was much better, and in five weeks ceased to attend, as he was well. A little thickening of the skin remained, but there were no papules, and itching was not complained of.

E. S., a small, ill-developed boy of 9, was brought, after having suffered from eczema nearly all his life. The eruption was not pustular, but a compound of vesicles and papules. The skin was thickened and very irritable. He was ordered olei morrhuæ ʒj bis die, and directed to use the following oil: Olei deelinæ; olei ricini āā ʒj; oleii olivæ ʒij; m. ft. ol. He improved steadily under this treatment, and in three weeks time was nearly cured. The thickness of the skin had not disappeared, but the irritation had subsided, and no fresh vesicles or papules had been formed.—*Brit. Med. Jour.*

Successful Removal of a Tumor from the Spinal Canal.—On June 9th, Mr. Victor Horsley removed a tumor from the spinal canal of a gentleman aged forty. The diagnosis of compression of the spinal cord by a morbid growth was made by Dr. Gowers, who saw the patient with Dr. Percy Kidd. The patient was suffering from paraplegia which commenced gradually six months ago, and from pain round the chest of four years' duration. Sir William Jenner afterwards saw the patient, and confirmed the diagnosis. Dr. Gowers suggested that an attempt should be made to remove the growth. From the history of severe neuralgic pain in the back and along the course of the left sixth dorsal nerve which preceded the paraplegia, it was considered probable that the growth commenced in the posterior root of the nerve, and afterwards pro duced pressure on the cord. The operation was performed by a long incision in the mid-line of the back, having its centre about the fifth dorsal, down to the spines of the vertebræ. The muscles were cleared off from the laminæ and retracted. The spines were removed by bone forceps, and then the laminæ trephined. An incision was made through the membranes and the cord examined, a tumor about the size of the tip of the little finger being eventually found on the posterior root of the nerve about the level of the third dorsal vertebræ. This has pressed the cord forward and to the right, producing a deep depression in its substance. It was removed with the nerve to which it was attached. The incision through the membrane, which was at least three inches long, was not sutured; the wound in the soft part was closed with sutures and drained. Strict antiseptic precautions were taken at the operation. Since the operation there has been no rise of temperature, and the pain has died out. The painful spasmodic action of the muscle of the lower extremities from which the patient suffered has diminished, and there has been less rigidity of the legs, but the paraplegia continues. The growth, which was of a pinkish color, elastic and vascular, has not yet been submitted to microscopical investigation.—*Lancet*, June 10, 1887.

A temporary refuge station is being established by the Marine-Hospital Service at Egmont Key, where ten days' detention will be required, and disinfection of baggage will be carried out.

Medical Items.

Dr. Seneca D. Powell has been elected Professor of Clinical Surgery in the New York Post-graduate Medical School and Hospital.

Dr. Sydney Ringer has been elected to fill the Professorship of Clinical Medicine made vacant by the death of Wilson Fox. Mr. Victor Horsley succeeds Dr. Bastain as Professor of Pathology.

The American Neurological Association met at the West End Hotel, Long Branch on July 20th, 21st, and 22nd, under the Presidency of Dr. Landon Carter Gray, of Brooklyn.

Our St. Louis exchanges complain that their delegates to the American Medical Association were not treated with proper hospitality, the delegates themselves referring "in bitter terms to the very unsocial features of the entertainments given."—*Med Record.*

More money is needed for the International Congress. Present accounts give the amount raised, aside from the Congressional appropriation, as not above $5,000. We trust that the gentlemen who have talked so bravely about the prospects of the meeting will not stop with words.—*Med. Rec.*

A poison antidote table says that equal parts of calcined magnesia, powdered charcoal, and hydrated peroxide of iron, in a sufficient quantity of water, is a general antidote for poisoning, for use when the poison is not known. It is a perfectly harmless and simple preparation.—*Technics,* May 17, 1887.

The yellow fever is reported to be slowly increasing at Key West. On Saturday, July 9th there were five new cases and two deaths. On Tuesday there were the same number of new cases and one death. The record to July 10th stands: Total cases, 83; deaths, 27; sick at present, 33; discharged cured, 23.

At a recent meeting of the Imperial Society of Physicians, a letter from M. Pasteur, in Paris, was read, in which he defends himself against the imputations made against his system by the Vienna professors, especially Prof. Billroth, who pronounced the vaccination of hydrophobia a fiasco.—*Med. Rec.*

The anxiously-looked-for autobiography of the late Dr. Samuel D. Gross has been issued from the press of George Barrie, in two very handsome octavo volumes, of over 400 pages each. The work treats of the men and times of Dr. Gross's long and active professional life, and cannot fail to prove of interest to a large circle of readers.—*Med. News.*

Dr. A. Micthell has collected a large number of statistics bearing on the question of idiocy, and comes to the conclusion that illegitimacy is a very prolific cause of this condition. He believes that the mental agony suffered by the unfortunate mother reacts upon the fœtus, causing an arrest of development and occasioning congenital iodiocy.—*Med. Record.*

Jubilee Medical Honors.—Our English medical brethren apparently expected some high honors to be bestowed upon them on the occasion of the Queen's Jubilee. We learn, however, that Her Majesty was "graciously pleased" to make knights of Dr. Garrod, Mr. G. H. Macleod, and Dr. Aitken. One veterinarian, Mr. H. L. Simpson, was also made a knight. Various minor decorations were also bestowed. But, plainly, the English doctor is not yet thought good enough to be made a peer.—*Med. Rec.*

A suit was recently brought against the New York Hospital by a patient who had been operated upon for cystitis by cystotomy. The damage claimed was $30,000, on account of impotence from injury of both ejaculatory ducts and wound of rectum. The left lateral incision was made. The plaintiff claimed that in consequence of the injury all his semen escaped into the bladder. It was shown by the testimony of Dr. W. T. Bull, the operator, and Drs. George G. Shrady and L. B. Bangs, that such an injury was impossible under the circumstances, and a verdict for the hospital was rendered accordingly.—*Med. Rec.*

Coleridge on the Subjective Side of Jaundice.—In a letter from Coleridge, recently found and published, he says: "I have felt unwell and depressed by day and wandering all night through the Swedenborgian Devildom, like a Dante all at once left by his guide, or whose supposed Virgil had turned into Drs. Brownrigg. While I remained quiet and motionless I had full possession of my thoughts, but as soon as I attempted to give them utterance I became flurried and lost all command over them. The cause and occasion of all this distemperature were at length disclosed, and on commencing my morning shave, the only time I have the pleasure of looking at myself, I was greeted by a duplicate (in color though not in stature) of Nebuchadnezzar's images. From the hair-line of my forehead to the soles of my feet all gold, with some alloy of brass or copper for the neck and breasts; in short, a consummated jaundice."—*Med. Rec.*

The Illinois Law and Indian Doctors.—The Amended Practice Act which enables the State Board of Health to deal with itinerant "doctors," "Indian doctors," and the like, seems to be driving some of them from this State. The newspapers this week show that a good many of them are in serious trouble in adjoining States.—*Journal of American Medical Association.*

We would call the attention of these "irregular" gentlemen to the superior advantages of Baltimore as a place for a medical man who is not in "good and regular standing." Here he will be troubled by no law to regulate his practice, advertising is cheap, and an energetic man can soon become a *professor* in a college (?).

Selected Articles.

NOTES ON HEAT AND "HEAT-STROKE" AT ASSOUAN IN THE SUMMER OF 1886.*

BY SURGEON G. DOUGLAS HUNTER, MEDICAL STAFF.

Having passed the summer of 1886 at Assouan, perhaps a few remarks on the heat and its consequences might interest your readers. The month of May was exceedingly hot; there was a large amount of sickness, and enteric fever was very prevalent. Five cases of heat-stroke were admitted to hospital; they were all slight cases, and speedily recovered. I propose to confine myself mainly to the month of June, which was the hottest month experienced.

During the hottest week (12th to 18th) the minimum shade temperature averaged daily 120° (less a small fraction). June 16th was the highest record, namely, 122.2° and the wet and dry bulb showed a difference of 50.2° on that day. The minimum temperature at night for the same week showed an average of 87.2°. The average strength of the garrison for the month of June at Assouan was 2,469. The average number constantly sick in hospital for the month of June was 208.

The great heat affected the cases of enteric fever, which were numerous, very differently; in some it caused great prostration, high rises of temperature; in four cases it brought on "heat apoplexy," which proved fatal; it prolonged convalescence, and left the patients very debilitated; in some cases it did not seem to produce any bad results.

There were forty-five cases of "heat-stroke" among the men, causing twenty-four deaths, and three cases among the officers, with one death; giving a total of forty-eight cases of "heat-stroke," and twenty-five deaths. A large number of cases of simple fever due directly to the effects of the sun, but none of these were serious, and recovered soon; these were not diagnosed as "heat-stroke."

Under the heading "heat-stroke," the *Nomenclature of Diseases* gives: (*a*) sun-stroke; (*b*) heat-apoplexy. Personally, I am unable to distinguish between the sub-varieties, as most of the cases presented the same symptoms, whether occurring during the day, when exposed to the direct rays of the sun, or in the shade of their barrack-rooms or at night, the latter being the most common.

Sir J. Fayrer, in *Quain's Dictionary of Medicine*, describes three varieties of sunstroke: (1) syncopal, (2) asphyxial, (3) hyperpyrexial. The five cases that died out of the hospital I cannot vouch for, but all the cases that were treated in hospital were of the latter type.

The *post-mortem* appearances were almost invariable the same: intense lividity of the surface, and one unfailing sign was the sub-conjunctival ecchymosis, which left a dark stain, in some case more extensive than in others, but always present after death. I do not know if this appearance has been noted before, but in the cases here it was, I believe, invariably present and almost pathognomonic of the disease.

Only a few brains were examined and these presented general engorgement of the vessels, especially at the base of the brain. Case 6 showed meningeal inflammation. The internal organs were invariably engorged with blood, the venous system being overloaded, and the blood non-aerated. The heart was generally flaccid and full of blood. The muscles were dark-colored.

Not many cases occurred due to direct exposure to the sun's rays, and in the majority of those in which it did occur the men were probably more or less under the influence of drink at the time; the majority of cases were overcome either in the shade of the barrack-rooms or in hospital, or at night. Two were found dead in bed. The mortality from "heat-stroke" was far higher in the summer of 1886 than in the previous summer. In 1855, though more exposed to the sun and not in such good quarters, the men had experienced the excitement of the late campaign, and had a considerable amount of work to

*From *British Medical Journal*, July 9, 1887.

get through, and consequently had not the time to get depressed, and were unable to indulge in alcoholic stimulants. In 1886 the men were fixed in quarters, which were hardly suitable to withstand any intense heat; there was a complete lack of all amusements, and a considerable amount of depression among the troops in garrison; they were prevented as far as possible, from free indulgence in alcoholic stimulants. The older soldiers suffered equally with the younger ones, and in proportion more so; June 16th was especially fatal to the older men. Large solar topees were worn by the men, and they were kept out of the sun as much as possible. The nights were warm, but there was generally some breeze, so that sleep could be obtained. Fortunately a very dry heat prevails here, otherwise the mortality would have been far higher. Rations were liberal and good; vegetables somewhat scarce; two ounces of limejuice were issued daily to each man. Non-commissioned officers were instructed to keep a supply of cold water at hand, and if any man showed signs of "heat-stroke" to apply the cold douche at once.

Symptoms.—The usual type was as follows:

A man was carried in with flushed face, hot, dry, burning skin; if conscious, complaining of intense pain the head; generally unconscious, pulse feeble, breathing shallow and labored; at time comatose, with stertorous breathing, in others violent convulsions relapsing into coma. The initial temperature generally varied from 104° to 107°; you could not depend on the strict accuracy of the clinical thermometer, owing to the high temperature of the external air, but the bodily temperature was always very high.

The cases occurring in patients in hospital presented similar symptoms, but were generally more insidious.

Several cases exhibited a kind of premonitory stage, the patient being admitted to the hospital with slight febrile disturbance, and after a day or two developed the disease in its full intensity.

In cases of enteric fever in which it occurred, it was either speedily fatal or seriously complicated the disease, the symptoms being high temperature, hot, dry, and burning skin, flushed face, and great prostration, which, if yielding to treatment, left the patient very weak and less fit to cope with the original disease.

In severe cases, in which the patient became comatose early, he usually died in a few hours without rallying. One or two cases rallied and then relapsed into coma. Case 6 was the longest case that terminated fatally. It the attack yielded to treatment the patient was left very prostrate, feverish, furred tongue, headache, etc., which passed off generally in a few days, and left him convalescent but weak and debilitated.

Most of the cases which recovered were considerably debilitated, and required change of climate; I am unaware if they suffered from brain mischief later on.

Treatment must be immediate and thorough. The patient should be stripped and laid in the coolest place possible—in the shade outside is best—and cold water dashed on the head and spine; this should be maintained; a large enema administered and the lower bowel well emptied. If the patient regains consciousness, he may then be placed on his bed (if the temperature remains high) in a wet pack, and ice kept to his head. Five grains of calomel may then be administered, and diaphoretics given frequently. To promote free action of the skin and maintain the action of the bowels is very needful. If a relapse threatens, douching should be at once resorted to. If there are no signs of ralying, use sinapisms to the heart, frequent douching, ice to head and spine, friction of the limbs; if the pulse is failing brandy at frequent intervals in small doses and brandy enemata. If respiration is failing, artificial respiration should be employed and well kept up. On no account give up every attempt until life is quite extinct. On no account bleed the patient. The after treatment is to maintain free action of skin and bowels—tonics and change of air to a temperate climate.

The essence of treatment is to reduce the bodily temperature as speedily as possible, and the surest way to do this is the application of cold water and ice; this should be maintained, and the least relapse dealt vigorously with in the same way. Immediate action of the bowels by enemata is very necessary, and an emetic is beneficial in suitable cases.

The close of the month of June saw a considerable decrease in the number of cases of "heat-stroke." July, although very hot, was not so unbearable as the previous month; during the month of July there were five cases of "heat-stroke," two died out of hospital, and of the three that were admitted all recovered. In June it was arranged that all men under 20 years of age, and all men of weakly constitution, should be sent down the river, and proceed to Cyprus for change of air; this had a very beneficial result and reduced the sick list considerably. At the end of July, the average strength of the garrison was 1,784; the number of sick in hospital was seventy-four. Only seventeen cases of enteric fever, and not one case of "heat stroke." This brings me to the end of the three worst months of the year. May being characterised by a serious epidemic of enteric fever, which gave rise to forty-seven deaths in that month alone. June following with its outbreak of "heat-stroke," enteric fever still prevailing, but gradually lessening, and of a less fatal character; July succeeded, at the end of which month, "heat-stroke" had disappeared, and enteric fever was immensely lessened. The whole period was a most trying and depressing one to both officers and men. If troops remain in Assouan during the coming summer, every possible precaution should be taken to ensure protection against the intense heat which is prevalent here. The huts should be high and have double roofs with free circulation of air between them; large verandahs around them, and ample cubic space to each man, and free ventilation through the huts. An ample supply of ice is a necessity and by no means a luxury, and for medicinal purposes is absolutely requisite.

A NEW TREATMENT FOR OBSTINATELY RECURRING ECZEMA.*

BY H. RADCLIFFE CROCKER, M.D., F.R.C.P.,

Physician to the Skin Department, University College Hospital, and Physician to the East London Hospital for Children.

When the diathetic or other defect of health upon which most cases of eczema depends is duly met by general and medicinal measures, and the local applications are adapted to the stage and degree of inflammation, while the denuded surface is protected from the irritating influences of air and water, the vast majority of cases get well; but, in a certain number, just when we think that we have conducted the patient safely through the attack, a fresh outbreak occurs and we have to begin again, and this over and over again until the resources of the medical man and the patience of the sufferer are well-nigh exhausted. It is for some of these disheartening cases that I now propose a means which will, I believe, bring relief in the majority of instances. I was first induced to try this treatment in a case I had under my care last year in a man, aged 56, who had had eczema on the hands and face, and had been incapacitated for work for three years; he was inclined to constipation, but otherwise his general health was excellent and he was robust in every way.

Various kinds of treatment were tried, both internal and external including that refuge of the destitute, arsenic, but although temporary improvement was obtained, so that the discharge and hyperæmia diminished, and he seemed to be getting well, in a few days out came the eruption as badly as ever, chiefly on the face and arms. I came to the conclusion that it must be due to a vasomotor neurosis, and that if I could get at his vasomotor centres I might do some good. Without in any way altering the treatment previously employed (feeling that I could not possibly make the eruption worse) I painted liq. epispasticus on the nape. Owing to the

*From *British Medical Journal*, July 9th, 1887.

thick scales the blister did not take, and it was repeated after cleaning the surface and a good blister formed; a fresh acute attack was just threatening, but it did not come on, and the patient felt better. Three days later part having healed, the blister was repeated and there was evident improvement after it; the scales were less and the irritation was much again, another blister was produced. This, however, did not stop the rash, which came out freely, but the itching was much less than usual, and the eruption lasted but a short time, and from that time he continued to improve and went out almost well, and was able to go to work for five months, but having to keep his hands much in water it then returned. Encouraged by this result in a very unpromising case, I have extended the treatment, but using milder counter irritants, such as mustard plasters or mustard leaves instead of blisters which were unnecessarily severe. The following case illustrates still better the value of the treatment.

Mr. R., aged 60, on August 5th, 1885, after a chill had a severe general attack of eczema, with bronchitis and nocturnal attacks of spasmodic asthma; by appropriate treatment all these symptoms were subdued, and a great deal of eczema had disappeared by the end of the month; every night, however, he had acute exacerbations in the legs, which itched violently, and fresh papules came out. On August 31st I ordered him to have a tile heated and wrapped in flannel and applied to the lumbar region. When I saw him again on September 3rd there had been no return of these nocturnal exacerbations on the legs, but the face and arm were giving great trouble. I tried to induce him to put on a mustard leaf to the nape, but it was not until he had endured ten sleepless nights that he would consent to try the mustard. He then put it on, and was so satisfied with the result that he put on another the next night of his own accord, and the nocturnal attacks were at once greatly relieved, but as there was still some irritation I painted on liq. epispasticus. A rather severe blister ensued, but from that time I had no further trouble, and in a fortnight I ceased to attend him.

In a case of eczema of the scrotum which had lasted for some weeks, where the irritation was as usual very severe, mustard leaves over the lumbar enlargement, rest, and a little olive oil smeared on to prevent the parts sticking to the bed-clothes, were the only means employed, relief to the distressing itching was at once afforded, and he got quite well without any other treatment.

Lately I have been using it in acute cases also, such as the following. Mrs. E., a stout woman, aged 40, had an acute attack of eczema of the face and forearms, with great swelling and redness, and profuse discharge of the arms but not of the face; she had saline aperients and lin. calaminæ. There was great irritation, and I ordered her a mustard leaf to the nape; the itching was less in the night, and the morning after, the swelling and redness decreased, and continued to do so as far as the face was concerned, and the arms were much easier; there was no eruption round the site of the mustard leaf.

These are only samples of many cases in which I have employed counter-irritation. I vary the position of the counter-irritant according to the region affected; thus, for the face alone, it is placed behind the ears; for face and forearms, on the nape; about the genitals or legs, over the lumbar enlargement; and if one leg only is affected, on the hip over the large sciatic nerve.

The result has been more or less beneficial in the great majority of cases. It has seldom failed to relieve the itching, and generally procured sleep, at least on the night of application, and often the alleviation has lasted for several nights. In many cases the redness and swelling has also subsided sometimes entirely, sometimes in great measure, and generally enough to make it more amenable to local treatment than it was before. To my surprise, I confess, in none of the cases has an eczema been excited on the site or neighborhood of the counter-irritant, even when applied on an already eczematous surface; and often, in such cases, the eczema cleared off all

round the site of the mustard; although, as might be expected, no benefit was obtained in a few cases, in none was the disease aggravated; at the same time, it is very probable that, if repeated too frequently, and at too short intervals, in some cases there might be increased irritation; perhaps it was so in the cases of general psoriasis in which I have tried it, but without expectation of much good. Strips of mustard leaf were put on all down the spine. In the next three days there was distinct improvement, less redness, and less scaling; it was repeated three nights later, and this time the eruption went back to its original condition; the treatment was not continued.

One advantage of this method is that it does not interfere in any way with other treatment, whether internal or external, and that it is safe; but inasmuch as there is a natural shrinking from irritants on the part of an eczema patient, it may be more prudent in some cases to begin with dry heat, such as a hot tile wrapped in flannel, and if sufficient relief is not obtained, to go on to stronger applications. It would have been easy to multiply successful cases, but I trust I have said enough to induce others to give the treatment a trial, and if they do so, I hope they will report the result.

Society Reports.

TRANSACTIONS OF THE CHICAGO GYNÆCOLOGICAL SOCIETY.

REGULAR MEETING HELD MAY 22ND, 1887.

The President, CHARLES WARRINGTON EARLE, M.D., in the chair.

Dr. Henry T. Byford made the folfowing remarks upon

THE PELVIC VISCERA OF AN INFANT, THREE DAYS OLD.

I have here the pelvic organs of an infant, three days old, which present some interesting facts bearing upon normal anatomy. We have the bladder in front, and the uterus situated behind and to the left side, directly in front of the rectum. The lower end of the cervix is decidedly to the left, as we often find it in the adult. The uterus is constituted of about one-fourth corpus, and three-fourths cervix; the cervix is also wider and thicker than the body. And what is also characteristic, and was first noticed by Winckel, the Fallopian tube, ovarian ligament, and broad ligament on the side towards which the uterus is placed are shorter than the tube and ovarian ligament on the other side, showing that in this case the normal position of the cervix is to the left of the median line. There is also a slight persistent anteflexion. The rudimentary ovaries are almost against the uterus, and the right one and one half times as large as the left. The cervical cavity is quite large and contains mucus. The cervix extends considerably below the *cul-de-sac* of Douglas. The uterine artery enters the uterus a little above the middle of the cervix, considerably below the upper end of the cervical cavity. It is also interesting to note that the arteries upon the right side are larger than on the left. The uterus has a slight inclination from the cervix up towards the right and towards the median line, and thus already exhibits a slight lateral version such as we see in adult life. The vesico-uterine and sacro-uterine folds are well developed.

Dr. Charles T. Parkes made the following remarks on

A CASE OF OVARIAN CYSTOMA, WITH TWISTED PEDICLE.

The specimen that I present for your inspection, is a case of ovarian cystoma with a twisted pedicle. The case was that of a woman, about 45 years of age, upon whom I operated a few weeks ago, and it was one of those satisfactory cases that we meet with occasionally, in which the patient positively gets better from the very day of the operation. This lady did not know that she had an ovarian tumor, previous to an attack of illness which came on about the 6th of April last, when she was seized with distention in the abdomen, pain, and

vomiting. She came under my care a week or so after this, with a temperature of 103° F., pulse 120, distended abdomen in which a tumor could be felt, and with evidence of severe peritonitis. At that time, I rather suspected that the cause of the trouble was some difficulty with the cyst, because I had the honor last year to report to the Chicago Medical Society a case in which the symptoms were very similar to this. It was a case of a twisted pedicle, in which the symptoms were abdominal pain, high temperature, and acceleration of pulse. Under local applications and rest in bed, the symptoms began to subside; she then developed a bronchitis which kept her in bed a little longer and postponed the operation. At the end of the third week from this time, the patient came to the hospital and was operated upon. When the incision was made through the abdominal walls down upon the cyst, there was found no space between the cyst and the abdominal walls, the cyst, being recognized from its color, was determined to be universally adherent to the abdominal walls. These adhesions were evidently very recent.

The cyst was tapped and then drawn out through the opening and the adhesions separated, as they presented at the incision. As they were of recent development, they were easily separated and without much hemorrhage. There has evidently been a twist in the pedicle at this point, then there is another decided twist at this point, and beyond that another, and if the light is good you can see the line of demarcation formed, in which spontaneous separation of the cyst would have finally taken place. The pedicle was divided just below this line of demarcation, which showed very plainly. There was a considerable amount of bloody fluid as you would expect inside of the cyst, and the patient was very pallid at first, which was one of the symptoms of her condition, showing that there was a considerable amount of hemorrhage as the result of the twisting of the pedicle. I am satisfied from the condition I found the pedicle in and the amount of adhesions present, that the principal part of the nutrition was carried on through these adhesions. The adhesions were universal and included every important organ, so the cyst got enough to keep up its supply and prevent mortification. It is the second case I have met with in my experience with ovarian cysts. It is not a rare occurrence, but it is important, if possible, to think of the symptoms that will call your attention to its presence. *The Journal of Obstetrics* mentions one case in which a twisted pedicle was followed by such hemorrhage that the cyst was ruptured and the patient died almost immediately from loss of blood.

Sir Spencer Wells mentions a case of a lady who came from Moscow to him for treatment, and who had to stop at Berlin on account of trouble with the pedicle, and when she came to London he operated immediately and found a large amount of blood in the cyst and in the abdominal cavity because of the rupture of the cyst. She finally recovered. I have not counted the number of twists there are here; I suppose it is impossible to tell how many twists are sufficient to cut off the circulation entirely; I imagine it does not depend upon the number of twists, but upon the degree.

Dr. Franklin H. Martin made the following remarks upon

APOSTOLI'S METHOD OF ELECTROLYSIS.

I feel somewhat timid in coming before this Society, made up of eminent surgeons, to describe and advocate a method of treatment for fibroid tumors of the uterus which, at best, by the majority of the profession is considered in the light of a temporary expedient.

While there has been, and for good reasons, a great deal of scepticism in the profession in regard to the value of treatment of fibroid tumors of the uterus by electricity, we are able to discern at present a general tendency to investigate its claims and to take advantage of its results. This tendency in the profession to investigate was brought about by the book of Dr. Apostoli, which appeared in 1884. Now, instead

of charlatans monopolizing this valuable therapeutic agent, we find men of position in other countries adopting it—Reiman, of Kief; Deletang, of Nantes; Hüe, of Rouen, Adolphe Elsassen, of Stuttgart; William Woodham Webb, of London; Gardner, of Montreal; and in this country, Engelmann and Hulbert, of St. Louis; Bartholow and Massy, of Philadelphia; Baker, of Boston; and Skene and Freeman, of Brooklyn.

I wish to confine my remarks this evening to the consideration of Apostoli's method of treatment of fibroid tumors of the uterus. Dr. Apostoli has done away with the mysterious low current. There is a positiveness about his use of electricity that has never been safely imitated by any other method. The reasons for Dr. Apostoli's success rests upon the following facts:

1. The use of strong currents.
2. Adoption of electrodes that make the use of a strong current possible, without harm to innocent tissues and without pain to the patient.
3. The recognition of the peculiar effects of the two poles and the application of them according to requirements.
4. Accurate measurement of current.
5. Rational discrimination in selection of cases.

By the employment of a strong current, short sittings are made practicable, and definite results are obtained. While the amount of electrolytic work done does not depend upon the strength of current, but upon the quantity, definite polar action depends almost exclusively upon the strength of current.

The electrodes used by Apostoli are in all cases of two varieties, the active or internal electrode is for the purpose of concentrating the current at the point where it it is most needed. This electrode may be simply a uterine probe of platinum, insulated to the cervical point, or a sharp needle of iridium, insulated to within an inch or two of its point, which will penetrate the mass of growth from the cervical canal. The passive or external electrode is for the purpose of completing the circuit in such a manner that the strong current shall pass through the largest diameter of the growth, and at the same time diffuse the current sufficiently to prevent pain.

When it passes through the sensitive integument, Apostoli uses for this purpose a biscuit of clay, moulded upon the abdomen, properly connected with one pole ot the battery. For this purpose, I use an electrode of my own device. Over the concave surface of a plate of soft metal is stretched an animal membrane, which is attached to the edges in such a manner as to render the interspace between the membrane and the metal water-tight. This space, which is from one-half to one inch in thickness, is filled with warm water. The membranous surface is applied to the abdomen, and suitable connections made from the metal with one pole of the battery.

The local effect of the negative pole when employed as the active electrode with a strong current is to produce liquefaction of the tumor with which it comes in contact, and is compared to the effect of a caustic alkali. In fact, it is called and is the alkaline pole. This pole, therefore, on account of its effect of rapid solution of tumors, is employed to reduce the size of these abnormal growths.

The local effect of the positive pole when employed as the active electrode, with a strong current, is to produce coagulation and condensation of the tumor with which it comes in contact, and is compared to a caustic acid. It is the acid pole. The coagulating effect of this pole is utilized with marked advantage in controlling the hemorrhages caused by fibroid tumors. Whenever the entire cavity of a bleeding wound can be reached with the positive pole of a sufficiently powerful battery by means of an electrode of platinum, the hemorrhage can surely be checked.

When a current of sufficient strength is employed to obtain the characteristic effects of the electrodes, as described above, in order to be of value in the treatment of fibroid tumors, a current of from fifty to one thousand milliampères is necessary. A current of this strength should never be used without proper

means of measurement at hand. The strength of the current employed should be varied with the work to be accomplished and the extent of active surface of the internal electrode in contact with tissues to be acted upon.

This scheme of treatment, which I have not been able in the time allotted to more than suggest, is capable of producing rapid and beneficial results. The most distressing hemorrhages can be permanently checked by the coagulating effect of the positive electrode; the most excruciating neuralgic pains, so often accompanying fibroid growths of the uterus, are almost invariably relieved; the smaller tumors are removed entirely, and the large ones rapidly reduced in size by the local effect of the negative pole and the electrolytic and cataphoric action of the current passing through the growth.

The method is free from danger if properly employed. I have yet to see an untoward symptom arise from its use. Its use is accomplished without producing pain enough to require an anesthetic. The applications are best made in the office.

DISCUSSION.

The President. I had the pleasure of seeing Dr. Apostoli when I was in Paris, and he seemed to be a very conscientious and patient worker. He takes great pains to explain his method to any one who appears interested, and I am not surprised to hear his work alluded to by the speaker in enthusiastic terms.

Dr. Daniel T. Nelson. One thing I would like to have the doctor explain is, whether from the cauterization there may be septic absorption; whether he has seen anything to lead him to fear septic material formed thus in the interior of the uterus and absorption from it which might be serious. I am very much interested in the doctor's plan of treatment. As the Follows of this Society perhaps know, I have been and am still working in another direction, and will be very much obliged to any one who will report to me their success with ergot. It seems to me there are certain cases that would be better treated by one plan of treatment than another. For example, this specimen that Dr. Parkes has shown us seems to me, could hardly have been satisfactorily treated except as it was, unless the growth might have been stopped by the removal of the ovaries. I believe the treatment adopted was the best. Whether there are certain forms of fibroid tumor that can be better treated by ergot and others by electricity is what I do not know, and am anxious to find out, and I hope we shall have reports of the progress of the work in that direction.

Dr. Franlin H. Martin. In answer to Dr. Nelson's question whether I have noticed septic absorption, I desire say I have not.

The probes and instruments used about in the operation are thoroughly sterilized; the probe is passed through flame, and the rubber used about the insulator is made thoroughly aseptic. I have a number of cases which certainly would be of interest to this Society, but I have purposely reserved them, because I expect to make a report later.

In the cases I have seen of a hemorrhagic nature, the hemorrhage has been checked. I have not seen a tumor that has not been materially reduced in size from a third to a half, and even two-thirds. I have seen three or four cases in which the tumor has entirely disappeared, and, as far as I was able to judge, the uterus was decreased to normal.

Dr. Nelson. What were the dimensions of these tumors?

Dr. Martin. The tumors I speak of now were small, from the size of an apple to that of a cocoanut. The treatment has a very decided and rapid effect in reducing the size of the tumor. In regard to the menstruation; in two cases that I have seen, the menstruation was entirely checked; in one or two others a slight show at the menstrual period was noticed. I have not seen sloughing, not enough to stop the progress of the treatment.

GENERAL PROGRAMME OF THE INTERNATIONAL CONGRESS.

The *Journal of American Medical Association* publishes the following:

As there appears to be a very general desire, both at home and abroad, to have the programme of arrangements for the meeting of the International Medical Congress made public, I herewith submit the formula therefor determined upon by the Committee of Arrangements entrusted with that duty.

First Day—Monday, September 5.

The Congress will assemble at Albaugh's Opera House at 11 A. M., and will be formally opened by the President of the United States, to be followed by a short address of welcome by the Secretary of State; Address by the President of the Congress; Report of Secretary-General and Chairman of Committee of Arrangements. Adjourn at 1:30 P.M. From 3 to 6 P.M., meeting of Sections at their respective halls. Evening *conversazione* at U. S. Pension Hall from 8 to 11 P.M.

Second Day—Tuesday, September 6.

Meeting at 10 A.M. at Albaugh's Opera House. General Addresses by Drs. Flint and Semmola. Sections will meet at 11 A.M., and adjourn at the same hour with Congress at 1 P.M. In the afternoon the Sections will meet from 3 to 6 P.M. In the evening it is expected that a reception will be given by the President of the United States, and the Corcoran Art Gallery will be thrown open to the members and their families.

Third Day—Wednesday, September 7.

The Congress will meet at 10 A.M. General Addresses until 1 P.M. The Sections will meet as usual at 11 A.M., and adjourn at 1 P.M. Afternoon meeting of the Sections from 3 to 6 P.M. Evening reception to the members and their families by the citizens of Washington.

Fourth Day—Thursday, 8th.

General meeting at 10 A.M. Addresses, if not previously delivered. Meeting of the Sections at 11 A.M.; adjourn at 1 P.M. Afternoon, Sections meet from 3 to 6 P.M. General reception buffet banquet at U. S. Pension Hall from 8 to 11 P.M.

Fifth Day—Friday, 9th.

General meeting at 10 A.M. Transaction of business affairs of Congress. Meeting of Sections at 11, and adjourn at 1 P.M. Afternoon, Sections meet from 3 to 6 P.M.

Sixth Day—Saturday, 10th.

General meeting at 10 A.M. Adjourn 11 for visit to Mt. Vernon.

On Sunday or Monday, the day not yet determined upon, an excursion train will leave Washington with the foreign members and their families for Niagara Falls, under the escort of a part of the Committee of Arrangements, selecting the route which will afford our foreign brethren an opportunity to see some of the most interesting and thrifty portions of our country, as well as very beautiful scenery.

In completing the details of this programme it may be necessary to make some slight modifications.

I send herewith an important communication from the Chairman of the Sub-Committee on Transportation, Dr. J. W. H. Lovejoy.

ALEX. Y. P. GARNETT, M.D.,
Chairman of Committee of Arrangements.

Railway Rates to Washington.

The Railroad Associations which have already agreed to make a reduction of fare for members of the Congress and their families on the roads under their control are:

The Trunk Line Association, the Central Traffic Association, the Newport News and Mississippi Valley Company, the Southern Passenger Association.

These cover the greater part of the territory east of the Missouri and Mississippi rivers. The whole list of roads controlled by these Associations is too large for publication, but members can obtain all the necessary information by application to the railroad agent at the starting point. It will be required to pay full fare to Washington and a return will be allowed for "one-third the highest limited fare" on the Association's certificate. It will be necessary for these certificates to be procured before starting and have upon them the receipt of the railroad agent for the full fare to Washington. Members intending to attend the Congress should, as soon as possible, make application to the undersigned for blank certificates of the Association over whose roads they intend to travel, and the blanks will be forwarded at as early a date as they can be obtained. A separate certificate will be required for each person.

J. W. H. Lovejoy, M.D.,
Chairman Transportation Committee.
No. 900 12th St., Washington, D. C.

Abstracts and Extracts.

Total Extirpation of the Cancerous Uterus.—We have already had occasion to note how frequently this operation has been performed in Germany, and how some German writers believe that their countrymen remove more uteri than would appear justifiable. Dr. Fritsch has recently published in the *Archiv für Gynäkologie* a communication on sixty cases of removal of the uterus through the vagina for cancer, the condition for which alone the operation is indicated. Seven out of the 60 patients died after the operation, a mortality of 11.6 per cent. Two died from hæmorrhage, 1 after syringing the vagina, 3 from peritonitis, and 1 from ligature of the left ureter. In the last case the kidneys were contracted. Of the 53 survivors from the operation, 17 had died already from recurrence, in 6 still living recurrence was reported by competent observers, 3 patients had not been heard of since their discharge, and 3 were only operated upon in September and October 1886. Twenty-four remained in good health, 9 of these being recorded as cured, two years having passed without recurrence. Dr. Fritsch does not agree with Ruge that three distinct forms of uterine cancer exist—cancer of the body, cancer of the canal of the cervix, and cancer of the surface of the vaginal portion. The last two forms are not always to be distinguished from each other. In both, Dr. Fritsch observes, the disease always begins on the boundary line between the squamous and the cylindrical epithelium. It is more important to divide cervical cancer into the exuberant or hypertrophic fungating form of the exedent, or rapidly ulcerating type. Dr. Fritsch objects to supra-vaginal amputation of the cervix; firstly, because in some cases of cervical cancer nodules have been found in the fundus; secondly, because the operation is liable to be followed by severe atresia; and, lastly, because hæmorrhage cannot be so readily controlled as during total extirpation. The operation, Dr. Fritsch observes, should only be performed when a permanent one appears probable. The uterus must be freely movable. When its mobility is impaired, cancerous deposit in Douglas's pouch or in the broad ligaments will almost certainly be discovered. The fungous type is the least serious, provided that the vaginal mucous membrane is not involved. On the other hand, in cancer hardly visible at the os externum, the parametric tissue is often extensively infiltrated. Dr. Fritsch is opposed to preliminary scooping out of diseased tissues or other partial operations, which, in his opinion, disturb the lymphatics and promote the spread of the disease. With regard to the stages of the operation, as performed by Dr. Fritsch, his principle is to keep the peritoneum open for as short a period as possible, and not to lay it open till the most difficult steps have been performed, and to get the uterus as freely movable as possible by detachment of the broad ligaments from their lateral inferior connections, so that the operator may know in time if really total removal of the growth is possible. Should the para-

metric tissues be found to be involved, the surgeon must proceed no further. Dr. Fritsch neither sews up the flaps nor drains; he plugs the vagina with iodoform. The greatest difficulties are encountered when the uterus is large. Dr. Fritsch has in these cases combined abdominal section with the vaginal operation. He does not believe that the patient need lie in any particular position after operation; the scanty secretion from the wound can be removed by pledgets of iodoform gauze. After recovery, a smooth and straight scar in the vault of the vagina is more favourable than a hard funnel-shaped cicatrix. No doubt timely performance of total amputation of the uterus through the vagina promises the best results, as uterine cancer does not appear to recur rapidly when completely removed. The operation, however, is difficult and tedious even for experts.—*Brit. Med. Jour.*, June 25th, 1887.

Subcutaneous Injection of Cucaine in Surgical Practice.—In the *Vratch*, No. 50, 1886, p, 892, Dr. F. J. Barsky, of Kharkov, writes that subcutaneous injection of cucaine is extensively used in the *clinique* of Professor W. F. Grube as an anæsthetic in cases of removal of superficial new growths, such as sarcomata, fibrosarcomata, lipomata, carcinoma of jaw, epithelioma of lip, atheromata, etc.; also in cases of simple incision, scooping out with a sharp spoon, cauterisation, destruction of hæmorrhoids with Paquelin's themo-cautery radical cure of hydrocele, removal of foreign bodies (needles, etc.), amputation of fingers, evulsion of nails, rhinoplastic and osteoplastic operations, gouging out bone, etc. The result of those observations may be summed up as follows: 1. An injection of five centigrammes of cucaine is sufficient to produce complete anæsthesia of an area measuring from four to six square centimétres. 2. Anæsthesia is complete in five to seven minutes, and lasts from twenty to thirty minutes. 3. Tactile sensibility is preserved, but only to a very slight degree. 4. Artificial local anæmia, produced by pressure with a drainage-tube or otherwise, seems to intensify the anæsthetic effect. 5. The dose varied between one centigramme (a syringeful of a 1 per cent. solution), and two decigrammes (four syringefuls of a 5 per cent. solution), but those most employed were five centigrammes and decigramme. As a rule, the dose up to twelve centigrammes did not produce any general effect; but in a nervous woman, aged 38, with sarcoma of the parotid gland, eight centigrammes gave rise to formication and numbness over the body, paleness of the face, giddiness, weakness of the pulse, dryness of the mouth and pharynx, difficulty of swallowing, dyspnœa, oppression in the chest, and vomiting. In a strong peasant, aged 45, with dry gangrene of two phalanges, one decigramme produced only dryness of the mouth; twelve centigrammes caused only a slight acceleration of the pulse; fifteen centigrammes produced, in from ten to twenty minutes, acceleration and weakening of the pulse, dryness of the mouth, sometimes giddiness and pallor, and once a condition resembling syncope. A dose of two decigrammes, in an anæmic girl, aged 13, in whom the os calcis was scooped for caries, gave rise, in fifteen minutes, to dilatation of the pupils, and on the day to headache and general *malaise*. 6. Inhalation of amyl nitrite (one, two, or three drops on a piece of cotton-wool) seems to be the best physiological antidote to cucaine; its action manifests itself very rapidly after a few whiffs. 7. The osseous system, even in its superficial parts, is very incompletely anæsthetised by cucaine. 8. Cucaine has no influence on the process of healing 9. Cucainisation presents many advantages compared with other local anæsthetic agents; the chief ones being rapidity of action, ease of application, harmlessness in regard to the tissues with which the drug comes in contact, and convenience for use in regions which are inaccessible, or nearly so, to other local anæsthetics. 10. Cucaine will supercede chloroform in many cases, as in cardiac or pulmonary disease, etc., or where the use of chloroform is difficult owing to the position of the patient—for example, that *a la vache* in operating for

hæmorrhoids, etc. Professor Grube and Dr. Barsky have lately tried with success a combination of cucaine with morphine, as recently recommended by Professor Schnitzler.—*Brit. Med. Jour.*

Carbolic Acid Poisoning from the use of Carbolated Cotton with a Child.—Dr. Jules Simon reports the following case in *Revue Mensulle des Maladies de l'Enfance:*

A little girl, aged 22 months, had a swelling of the submaxillary glands, for which tincture of iodine was applied, but, unfortunately, so strong that its escharotic effect was produced, and an ulcerated surface was formed. This was dressed with iodoform gauze and also carbolic acid wadding. Twenty-four hours after the first dressing the child was restless, complaining of pain in the head; the throat dry; the conjunctivæ injective; and coryza was present. The temperature was slightly raised, and the pulse very frequent.

The physician in attendance, fearing iodoform-poisoning, removed the iodoform gauze, but continued the carbolic dressing, and added borated cotton to the dressing.

Forty-eight hours after the first dressing the child was taken with uncontrollable emesis, prostration, and anuria; the carbolic acid dressing was then removed.

Great improvement followed in twelve hours, and in twenty-four hours the child was convalescent. The beginning of improvement was marked by the passage of a considerable quantity of urine almost black; the urine increased steadily in quantity, and became quickly normal. The fact that the urine gave no reaction for iodine showed that the poisoning was not due to that agent, while all the symptoms pointed to carbolic acid as the toxic agent.—*Ther. Gaz.*

Antipyrine in the Treatment of Headache.—This was the subject of a paper read before the N. Y. Academy of Medicine by Dr. W. H. Thomson, who said that he had used the drug on the recommendation of Dr. J. Blake White, but without expecting any success, for, although antipyrine reduced the temperature, it did not affect acute disease favorably, but sometimes made it worse. His first use of the drug in headache was on the 24th of September, 1886, and he had employed it with unfailing benefit ever since. He then gave the histories of some twenty cases of headache—nervous, malarial, and dyspeptic—in all of which he had used the drug successfully, in doses of from five to fifteen grains, repeated as often as was necessary to produce the desired effect. His conclusions were: That antipyrine was of great value in true migraine; that malarial headache was mitigated by its use, but not to so decided a degree; that dyspeptic headache was sometimes mitigated; that uræmic headache was not affected.

Dr. J. Blake White had given the drug a thorough trial before reporting upon it. In two years' constant use of it he had never been disappointed with it. Its action, he thought, was exerted first upon the nervous system, then upon the circulation, and finally upon the respiration. He always observed some hypnotic effect from it.

Dr. W. R. Birdsall considered antipyrine the most valuable single remedy for headache—useful, above all, in forms of migraine not amenable to other treatment. It was useful in the same cases as ergot and amyl nitrite. Given at the beginning of the attack, five grains would not infrequently suffice. The gastric headache following a debauch was promptly mitigated by one or two doses.

Dr. Thomson said that he was strongly prejudiced against the use of antiypretics as such, unless the mere temperature was affecting the muscular tissues unfavorably—especially were they unsafe in pneumonia and in such continued fevers as typhoid.—*N. Y. Med. Jour.*

Diarrhœa of Children.—As the season of the year approaches in which diarrhœas are especially fatal in children, we feel it not improper to call the attention of our readers to a remedy which, though used by some practi-

tioners, is, we think, still neglected by many of the profession. We refer to phosphate of sodium. In the summer diarrhœas connected with a lack of digestive power, in which the stools are either clay-colored or habitually greenish, phosphate of sodium often brings a favorable response when the ordinary remedies seem to irritate rather than do good. In nursing children it may be given in the milk, 10 grains of it in each bottle, or it may be given after eating, dissolved in a little water. It should be administered always in repeated small doses and not in a single large dose. Where there is habitual constipation, with occasional attacks of diarrhœa in young children, it is especially serviceable. It probably has some distinct specific action upon the glandular organs of the intestinal tract.

Another treatment of diarrhœa to which we want to direct the reader's attention anew, is the use of the cold bath. Our own experience has convinced us of the truth of the original affirmation of Dr. Comegys, of Cincinnati, that in the diarrhœas occurring in young children in intensely hot weather with more or less pronounced elevation of the bodily temperature, the cold bath will often suffice for a cure, and will often bring relief when all other measures fail. It should be given as often as the child's temperature rises; in rare cases once in every three hours. In other cases two or three times a day. The water should be of a temperature not above 80°, and the immersion should be sufficiently long to produce a distinct effect. Properly managed, these cold baths we think of inestimable value in the treatment of those forms of summer infantile diarrhœa which are the outcome of heat.—*Ther. Gaz.*

Boracic Acid in the Treatment of Leucorrhœa.—From the excellent results which are yielded by boracic acid packing in chronic suppurating otitis, Dr. N. F. Schwartz (*St. Louis Courier of Medicine*, June, 1887) was led to employ it in a case of leucorrhœa which had resisted the most persevering use of the ordinary remedies. The experiment was successful within a fortnight, and the patient has remained well for several months since. Dr. Schrawtz states that he has been equally successful in a number of other cases. His manner of using it is as follows: Having first irrigated the vagina with water at as high a temperature as can well be borne by patient, a cylindrical speculum is introduced, and the vaginal walls very carefully dried, first with a soft sponge and then with absorbent cotton. This done, boracic acid in crystals is poured into the mouth of the speculum and pushed up against the uterus and vault of the vagina with a clean cork caught in a uterine sponge-carrier, sufficient acid being used to surround and bury the intravaginal portion of cervix, filling the upper part of vagina. A tampon of absorbent cotton is then firmly pressed against the packing, and held *in situ* until the folds of the vaginal walls close over it as the speculum is withdrawn.

This should be allowed to remain three or four days, or even longer, as after this time there still remain some undissolved particles of the acid, nor will the tampon seem at all offensive. The ostium vaginæ, if examined in twenty-four hours, instead of being besmeared with the leucorrhœal secretion or discharge, presents a clean appearance, and bathed in a watery fluid, which begins to appear several hours after the packing has been placed, and in his cases this was the only discharge noticed afterwards.

However, a second or even a third repetition may be necessary, but in none of his cases, numbering nearly a score, has he found more than a second packing called for, and in many one sufficed; and in no instance has its use occasioned pain, nor even inconvenience.—*Ther. Gaz.*

Professor Billroth is credited with having written the following criticism on M. Pasteur's work: "Well, we don't blame the French for applauding so much Pasteur's discovery, for not only have they not made any progress in science these last twenty years, but they are following with difficulty and halting steps the colossal progress of German and English science."

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, JULY 30, 1887.

Editorial.

SYPHILIS OF THE NERVOUS SYSTEM.—Syphilis, as is well known, may attack any or all parts of the nervous system, brain, spinal cord, periplural nerves, membranes and nerve sheaths, together with the bloodvessels which supply these various parts. The lesion may be a gumma occupying a limited area, or a diffuse infiltration extending over a considerable surface, or again the only manifestation may be in the arterial coats. When we take into consideration these various modes of invasion it becomes evident that the symptomatology will be confused and uncertain. We are not aided by the skin eruptions for they have disappeared before the nervous symptoms set in, and we often have to rely upon the history which is liable to so many errors. The patient may not intentionally deceive us, for it is a matter of every day occurrence for patients to come into the dispensaries with only a slight "scratch" or a cut "made by a hair" or a little "blister," and the secondaries may not be such as to excite any comment in unobservant persons. On the other hand there is every temptation to deceive, especially in certain classes, and the young practitioner is not infrequently non-plused by the earnest and emphatic denial that there has been any opportunity for specific infection. It is a matter, then, of importance to have some general scheme of the symptoms of nervous syphilis, imperfect as such enumeration must of necessity be. One of the most concise arrangement of symptoms that has appeared is that given in a lecture by Dr. Gray, of the New York Polyclinic, before the Philadelphia Neurological Society and pubpublished in the *Medical News*, of July 9th. He formulates the symptom-group as follows:

"1. Quasi-periodical cephalalgia of a peculiar kind.

2. Hemiplegia under forty years of age, with or without preceding cephalalgia of the aforesaid type.

3. Cephalalgia followed by hemiplegia, which bear a singular relationship to one another in that the cephalalgia ceases immediately upon the supervention of the hemiplegia, and does not recur.

4. Convulsions in the adult, which have not been preceded by convulsions in infancy, and are not of traumatic or nephritic origin, or due to pregnancy, or in an individual subject to migraine.

5. Symptoms indicative of a lesion at the base of the brain.

6. A comatose condition extending over days or weeks, not traumatic, meningitic, diabetic, nephritic, or from typhoid fever.

7. Tabes dorsalis.

8. General paresis.

9. Spinal lesions in a subject who has had intra-cranial syphilis.

These symptoms may of course present themselves under various combinations. One word as to prognosis: this depends very much on whether there has been any destructive process inaugurated, and also upon the thoroughness of the early treatment.

Nervous diseases at the hands of the general practitioner meet with a very empirical and routine treatment for two reasons: first the diagnosis has not been sharply made in most instances, and second, the treatment must necessarily be, in many cases, tentative, and it is impossible to lay down any hard and fast rules.

A large majority of these cases at one time or another have taken iodide of potash, and this empiricism has been of use in testing the efficacy of the drug.

Frequently one sees the report of a cure of some lesion by the use of the iodide, and in many cases the inference must follow that the lesion was syphilitic.

The rule for the treatment of such cases is very simple. If it has been decided that the symptoms may be the result of syphilis, and in many instances as a *dernier resort* vigorous anti-syphilitic treatment must be begun. There is no question as to the efficacy of iodide of potash if given properly, which means if given in large enough doses. It is useless to give the ordinary gr. v or x t.i.d. for a few weeks: begin with gr. xv–xx three times daily and increase a grain a day until the symptoms yield under this treatment or iodism is produced. Dr. Gray states that the continuous use of small doses will produce a more severe iodism than is seen when the large doses are employed, and he also makes the rather remarkable statement that when signs of iodism appear, by rapidly increasing the dose, it is often possible to establish a species of tolerance of the drug. Probably the most convenient way of administering the drug is the saturated solution in water of which a drop nearly equals a grain of the salt. It hardly seems rational that these enormous doses are absorbed, but the plan is growing in favor. About the use of mercury there is a great difference of opinion. Dr. Gray condemns it strongly, and declares that he has seen cases improve under large doses of the iodide, after a fruitless trial with the mercurial treatment. On the other hand such authorities as Von Zeissl, Gowers, Hammond, and Bumstead and Taylor recommend the continuous use of small doses of mercury along with iodide of potash, or mercurial inunctions. After the symptoms are relieved it is always well to keep up the treatment at intervals sometimes for years, as there is a great tendency for a relapse after the cessation of medication. Syphilis enters as a causative factor into so many nervous diseases that it is always best to try this plan of treatment. Often it is merely a forlorn hope, but in just such cases have brilliant results been obtained. If we have reason to believe that the specific process has become very diffuse, or that it has really inaugarated an organic disease, then the chances for relief are very slight. The whole method of treating syphilis is so empirical that it is unwise to try and apply strictly scientific rules to it, and though it may cause the exact therapeutist a pang to work so much in the dark, the only recourse left is the clinical test. We can't say just how the iodide acts any more than we can say why it is that the large doses are so much more efficacious than the small ones, but that very fact, instead of making us unwilling to use the remedy, should stimulate more exact and pains taking experimentation.

The Expulsion of the Placenta.—Opinion among obstetricians is now pretty well divided into two views concerning the removal of the placenta after labor. The method of expectancy has been pretty well discarded and there are probably few obstetricians who do not remove the placenta either by traction or expression, or by the two methods combined. Each of these two methods possess advantages which are clearly understood by most obstetricians, still it is not uncommon to find partisans who hold to the practice of one method in all cases to the exclusion of the other. To such men we present to their consideration the very concise statement recently made by Dr. A. Auvard, of Paris (*American Journal of Obstetrics*, July, 1887, page 726). Dr. Auvard says: "Do nothing during the first period of the third stage when the placenta is separating; interfere, if need be, during the second period by expression through one hand on the uterus and by traction on the cord with the other hand; during the third period keep up traction with the one hand and steady the uterus with the other." Dr. Auvard refers of course to the purely normal stage. In cases of complication the management must differ according to the conditions observed.

Miscellany.

Treatment of Cholera Infantum at the Thomas Wilson Sanitarium.—Dr. William D. Booker, Physician-in-charge, directs that the patient be made to lie upon the bed, and all unnecessary handling avoided; thorough cleanliness is observed, soiled clothing and diapers being removed from the room at once, and the room kept well ventilated. Care is taken to protect the body from sudden changes in atmospheric temperature, by suitable regulation of the clothing or wrapping.

In the early stage, when there are high fever and frequent vomiting and purging, as little as possible is taken into the stomach; fresh spring water or pieces of ice are given to relieve the thirst, the quantity allowed depending upon its retention by the stomach. Peptonized beef-tea, if retained, is given in teaspoonful doses every three or four hours, and no milk food allowed until vomiting ceases. Fifteen to twenty drops of brandy in a teaspoonful of water are given every two hours, the quantity and frequency increased as the pulse grows weaker.

The bowels are irrigated once or twice daily with two or three quarts of lukewarm water. A Nélaton's catheter attached to a fountain-syringe is introduced gently, and as high in the rectum as possible; the water is then allowed to run into the gut in a gentle and steady stream until it runs clear. The washing out is thorough, and always given by a physician; it has proved most decidedly beneficial in checking the vomiting and purging, and relieving the stupor. Deodorated tincture of opium, or sulphate of morphia with resorcin, is given by the stomach, if not contraindicated by stupor.

In the stage of collapse the extremities are kept warm with hot-water bottles or cotton wadding; poultices of flaxseed meal and mustard are kept over the belly, and stimulation is increased. Aromatic spirits of ammonia is added to the brandy, and, when the collapse is extreme, tincture of musk, or ether, given hypodermatically. When vomiting ceases, a return to milk food is gradually effected. At first teaspoonful doses of peptonized milk, diluted with water, are given at long intervals, and the quantity and frequency very cautiously increased. If vomiting returns, milk is stopped at once.

When reaction comes on, and the heart's action becomes stronger, the stimulation is gradually diminished. If the diarrhœa persists, it is treated with opium and resorcin, alternating with small doses of nitrate of silver by the mouth, and rectal irrigations. The body is sponged daily with warm water and soap. The dusting powder used is composed of lycopodium with four per cent. of salicylic acid. The greatest care is still observed in the diet, and all the minor details of nursing.—*Med. Mews.*

The String-drain as a Supplement to the Ordinary Drainage-tube.—Dr. A. R. Jenkins proposes in the *Annals of Surgery* for May, 1887, as an adjunct to the drainage-tube, the introduction of one end of thirty or forty feet of rough string, highly hygroscopic, and completely aseptic, through the usual "Chaissaignac drainage-tube," so that, when the last is placed in the wound, the string may be drawn through, from time to time, as will be explained hereafter.

The string may be of cotton, linen, or wool, that has been freed of fat and disinfected, for which purpose it is recommended that it be treated after the manner that V. Bergmann prepares his gauze,—by immersing the absorptive string for one hour in the following: Sublimate 1, glycerin 50, alcohol 100, water 150, warmed; then to be dried, and kept in hermetically-sealed glass jars; it will then hold one-third per cent. sublimate, and is very absorbent. The end of the string being passed into the tube, and the tube placed in the wound, and it closed, then the strings and aperture or apertures of the tube are covered by the usual protective of "gutta-percha paper" or "Lister's oiled silk," to hinder evaporation or gluing of the string. The string is now tried to see

that it draws freely, and is so placed that it lies along the line of least resistance, and closely applied to the body's surface; over the guttapercha paper and string the gauze and cotton, etc., are to be placed. The coil of the string may be kept in antiseptic magizine, such as a glass bottle, which can be included in the bandage or left out, as desired; in the last case, when not being used, the bottle should be tightly stoppered, and covered by an antiseptic bandage. The draw end should be left out, and can be drawn upon from time to time, as may be necessary, until it comes free of secretion.

The soiled end of the string can then be cut away, and it and the bandage at its emergence disinfected with a saturated solution of iodoform in ether.

The other end should be protected most rigidly against infection, as mentioned above.

Or the string might be placed in a coil in the wound itself, in form of tampon, and passed out through a drainage-tube.

This might apply in wounds such as would-be left after the removal of tumors (as lipoma), or might thus be used with Martin's drainage-tube in Douglas's fossa."

The process advocated is recommended during the first forty-eight hours, when the wound is pouring out a large quantity of serum, before granulation is established on the wound's walls, which follow especially operations in which "carbol" or other irritants are extensively employed, and in this time the tube is most likely to be stopped by coagula.—*Ther Gaz.*

A New Test for Morphine.—A novel and very beautiful test for the presence of small quantities of morphine ($\frac{1}{200}$ gr.) has recently been suggested. To the solution to be tested add a few drops of strong sulphuric acid and about the same quantity of a solution of sulphate of sodium. Heat the mixture in a porcelain capsule, and directly it begins to give off sulphuric vapor cool it suddenly, when it assumes (if morphine be present) an intense violet coloration. If the mixture be further heated, it turns brown, and when cooled, the addition of a few drops of water determines a vivid red coloration, which turns a pale green if more water be added. If at this stage an equal bulk of chloroform be poured into the mixture and well-shaken, the chloroform becomes of a bright blue color.—*Brit. Med. Jour.*

The Proper Position at which to Open a Felon.—In opening a felon, the parts to be avoided are lines of the arteries and that of the flexor tendon, which is the median line. The felon should be opened midway between the artery and tendon. If necessary, it can be opened on both sides. If the sheath of the tendon is opened, the tendon will almost always slough, and the finger will be useless.—*Dr. John Ashhurst, Jr., in Polyclinic.*

Gastic Ulcer.—Ulcer of the stomach is probably a much more frequent disorder than is generally recognized. On the other hand it probably is often believed to exist when not present. Our own experience has led us to think that the positive diagnosis as to its existence or non-existence is in some cases impossible. It may be simulated by chronic gastric catarrh or by neurosis of the stomach. Pain after eating, with vomiting, and epigastric tenderness are very common in hysterical women, especially in girls shortly after puberty. The absence of blood from the vomit is not of as much importance from a diagnostic point of view as appears at first sight. Hysterical vomiting is not rarely accompanied by slight or even pronounced hæmatemesis, and we have seen fatal ulcer of the stomach without hæmorrhage, and, indeed, without a history of vomiting. Gastric ulcer is of course not infrequent in young hysterical girls, but that the gastric symptoms are often not due to any stomachic ulceration is proven by their occasional sudden disappearance.

Our own experience is that in many of these neurotic cases a quarter of a grain of nitrate of silver with a grain of hyoscyamus, accompanied by soft diet, is efficacious. If however, it fails to do good in the course of a very few

weeks, its use should be abandoned, and the treatment be that of hysteria, with a use of diluted nitro-muriatic acid at meals.

In a recent article in the *Medical Press* Dr. W. H. Pearse calls attention to the fact that many of these cases do best when the eccentricities of diet are given full swing. If the patient prefers smoked and salt fish, salt meats, pickles, onions, or even Dutch cheese, he allows the article to be taken with asserted good results. A favorite article with him seems to be one which is not much used by the Anglo-Saxon race in America, namely, "potatoes with vinegar." Whether by this is meant the potato salad beloved by our German brethren or not, we do not know.—*Ther. Gaz.*

Cancer of the Breast.—Mr. H. T. Butlin (*British Medical Journal*, 1887, vol. i. p. 436) gives the result of the investigation made upon this subject by the Collective Investigation Committee of the British Medical Association. The returns number 210.

1. *The influence of mastitis in the production of cancer.* Out of 174 instances previous inflammation or abscess of the affected breast had been noted in 27 cases. No such disturbance had been noted in the remaining 147 cases. From the returns it may be gathered that a previous mastitis plays a quite unimportant part in the etiology of cancer. In nearly one-half of the cases 20 years had elapsed between the inflammation and the appearance of the tumor. The form of inflammation that would seem to predispose to cancer is one that is continuous, or liable to frequent recurrence, or the seat of a chronic irritation.

2. *The influence of inheritance.* Out of 184 cases, in 116 there was no family history of cancer; in 68 there was. The manner of distribution in the 68 cases was as follows: 44 patients had only one cancerous relative, 19 had 2, 3 had 3, and 2 had 4 cancerous relatives apiece.

Thus the 68 patients had among them no less than 99 cancerous relatives.

In only 30 instances were the parents, grandparents, or great-grandparents of the patient cancerous.

There is thus a history of cancer in the direct line of descent in no less than 20.6 per cent. of the cases.

3. *The influence of diet.* Out of 194 returns 123 patients are stated to be moderate feeders, 57 small feeders, and 12 large feeders. The tables do not support the statement that cancer is more common in large eaters of meat.

4. *The influence of locality.* The returns under this heading, as well as under the previous one, are scant and unsatisfactory. Town as compared with country, and high elevation, as compared with low, would appear to have no influence in the etiology of cancer.

The returns agree, to a great extent, with the conclusions of Mr. Haviland, who finds the lowest rates of mortality from cancer in those parts of England and Wales which are composed of the hardest and most elevated rocks, or the most absorbent (like the oölite and chalk); and the highest rates in the sheltered and low-lying grounds which are composed of crag, alluvium, and clay.—*American Journal of Medical Sciences.*

Treatment of Dyspepsia.—Dr. Wm. Henry, of Harmon, Ill., writes to the *Journal of American Medical Association* that for the last twelve years he has met with almost unlimited success in treating dyspepsia with hydrochloric acid. "I use it in the proportion of about ʒij nitro-muriatic acid to ℥iv water, believing that the combination of the two acids is better than one alone. I invariably give the solution teaspoonful doses immediately after meals. I have treated some of the most severe cases, and have cured some of the most obstinate, with this combination.

When the heart is sypathetically affected I have used tinct. digitals, gtt. v--vj, three times a day with good results.

When there is constipation I have of late had excellent results from a combination of cascara sagrada and fluid extract juglans cinerea, teaspoonful three

times a day. I insist that my patients should abstain from tea and coffee, and use either water or milk, especially buttermilk, which seems to have an excellent effect upon the stomach and alimentary canal generally, giving health and vigor to the absorbent vessels.

When there is much gastric distress after eating a few drops of chloroform will soon relieve the pain.

In severe cases as gastralgia there is nothing better, in many cases, than oil of cojeput, gtt. v--vj.

In cases of vomiting, chloroform has a soothing effect, and sometimes a small dose of morphia has a good effect in quieting the nervous system. Or a mustard plaster or horse radish leaves may be used.

In some cases in which the patient uses tobacco I forbid it, and the patient gets well without medicine."

Epistaxis.—In a paper on this subject (*Med. News*, July 23rd, 1887) Dr. E. Fletcher Ingalls concludes as follows:

1st. In ordinary cases, epistaxis ceases spontaneously; therefore, it makes no difference what innocuous treatment is employed.

2d. Epistaxis in children and young adults is generally an effort of nature to relieve plethora, and therefore should not receive active treatment.

3d. Persistent or frequently recurring bleeding from the nose may sometimes be relieved by constitutional remedies, but it usually demands topical treatment.

4th. When bleeding is profuse, it may often be checked by insufflations of cocaine, or the vegetable astringents, which may, if necessary, be supplemented by plugging the nostrils.

5th. When it cannot be checked in this way, the nasal cavity should be treated with iodoform, and then thoroughly plugged from the front with a strip of gauze saturated with tannic acid. This method will nearly always be successful, and, therefore, tamponing of the posterior nares, which is sometimes dangerous, should be employed only as a *dernier ressort.*

6th. In nearly all cases the source of hemorrhage may be detected by careful rhinoscopy.

7th. In these same cases the affection may generally be cured by the judicious use of solid nitrate of silver, or, better yet, by the galvano-cautery.

Death from Tight Lacing.—A sensational illustration of the fatal effects of tight lacing was afforded last week by the death of a single woman, aged fifty-two, who died quite suddenly in the street. Mr. A. A. Varne, the house-surgeon of the Northwest London Hospital, to which institution the lifeless body was taken, stated that the deceased was a woman who laced very tightly, so much so that she could hardly breathe, and it was owing to the impossibility of proper expansion of the lungs that syncope had been produced. Two years ago he had been called to her in the street; she had fallen down and "broken a bloodvessel." Here is a text which popular health lecturers will be able to use effectively, it may be hoped, and—we fear—for many a long day.—*Brit. Med. Journal.*

Gleet.—Bumstead relates that Ricord used to say to his students: "Gentlemen, if I am to go to—well—the bad place, I know what my punishment will be. I shall have a lot of fellows with their lamentations, their importunities, and their prayers to make them well." Bumstead adds: "This *mauvais mot* but faintly indicates the annoyance which a case of gleet often gives both to patient and surgeon."—*Columbus Medical Journal.*.

Morphine and Apomorphine in Whooping-cough.—Dr. Fedoroff (*Proc. of the Arkhangelsk Med. Soc.; British Medical Journal*) states that he has observed good results from the administration, four times a day, of a tablespoonful of a mixture containing 2 grains of morphine hydrochloride, 1 grain of apomorphine hydrochloride, ½ drachm of hydrochloric acid, and 8 ounces of distilled water. The paroxysms are lessened in number after the first few doses. —*N. Y. Med. Jour.*

Medical Items.

The Hospital Sunday Fund in London has reached a total of £35,000.

The Virginia State Medical Society is to meet at Richmond on October 19th, 1887.

Professor Flügge, of Göttingen, has been appointed to a newly established chair of hygiene in the University of Breslau.

Dr. Henry J. Bigelow, the well-known Surgeon of Boston, has been dangerously ill but is now rapidly recovering his health.

The Faculties of Paris contain, altogether, nearly 11,000 students, comprising 3,696 medical students of whom 108 are females and 593 foreigners.

The Pennsylvania State Medical Society has appropriated $1000 to the Ninth International Medical Congress, and $500 towards the erection of a monument to Dr. Rush at Washington, D. C.

All the conductors on the Maine Central Railroad have been provided by the management of the road, with cases containing all the remedies to be used in cases of accident.—*Medical Record.*

The "celebrated" Dr. Schweninger has contracted to reduce the corpulance of the Czar. Terms, £1200 if successful, £500 and travelling expenses if not successful.—*Boston Med. and Surg. Journal.*

With microbes in the drinking water, tyrotoxicon in ice-cream, malaria in water-melons, Bright's disease in beer, and paralysis in iced-tea, wherewithal may the thirsty soul refresh itself in summer time?—*Med. and Surgical Reporter.*

Twenty advertised cures for the opium habit have been examined by Dr. Davenport, State Analyst of Massachusetts. All but one contained opium; this one was called the "double chloride of gold," but contained no trace of gold.—*Exchange.*

Dr. Jos. C. Hutchison, a well-known physician of Brooklyn New York, died on July 17th, at the age of 60 years. Dr. Hutchison was born in Missouri, but settled in Brooklyn in 1852. He held at one time the chair of Operative and Clinical Surgery in Long Island College Hospital and from 1873 to 1876 was Health Commissioner of Brooklyn.

At a meeting of the Hospital Medical Society of Paris, M. Ferrol brought up the case of a patient, aged fifty-six, suffering from cancer of the stomach, in whom the subclavicular glands were infiltrated. This is his fourth case in which he has noted the enlargement of the subclavicular glands in this disease.—*Boston Med. and Surg. Journal.*

Poisoning by Locust Bark.—Dr. Emery, of Brooklyn, reports the poisoning of thirty-two boys, at an orphan asylum, from chewing the inner bark of the locust tree, which had been stripped from fence posts. This, we believe, is the first instance on record of poisoning from this cause. Locust bark should be investigated chemically.—*Medical and Surgical Reporter.*

Three young internes of the Newark City Hospital have received a very severe lesson. A patient was brought to the hospital comatose. He was thought to be suffering from alcoholism, and he was treated accordingly, being given a douche and strong cutaneous irritation. The patient died, and on autopsy there was found a tumor of the brain. A coroner's jury investigated the case, and the internes were thereupon arrested for manslaughter.—*Med. and Surg. Reporter.*

A prize of $5000 is offered by the Grocer's Guild of London, for an original discovery in sanitary science. The successful essayist is expected to discover a method by which vaccine may be cultivated apart from the animal body without loss of potency. The prize is known as the "Quadrennial Discovery Prize," and the subject above indicated is the same as that which was proposed during the four years 1883-1886, and which failed of solution by any of the competitors. Competing essays will be received from any source, and must be forwardad on or before December 31st, 1890, to the Worshipful Company of Grocers.—*Med. News.*

Dr. William von Muralt, of Zurich, speaks highly of skin-grafting after Thiercsh's method. In one case of a boy aged 3, under his own care, with two burns measuring respectively 6½ by 1 centimètre, and 6½ by 1. 2 to 3 centimètres, he pared the granulations with scissors, and covered the surface with very thin strips of skin measuring 10 by 2 centimètres. The wounds were dressed with protective strips of gauze soaked in a solution of chloride of sodium (6 in 1000), caoutchouc paper, and a roller bandage. For several days at first the dressings were changed daily. Cicatrisation was complete in twelve days.—*British Medical Journal.*

Dr. Marti, of Brietenbach, strongly recommends the injection of cucaine (one decigramme in 30 grammes of distilled water) as a preliminary step in cases of hydrocele treated by iodine. In his two cases, after emptying the sac, he first injected the cucaine solution; and then, about five minutes afterwards, thirty grammes of tincture of iodine. No pain whatever was felt by the patient till the second or third day—that is, till the development of reactive periorchitis.

Dr. Marti has also had excellent results from the internal administration of cucaine (15 centigrammes in 150 grammes of water, a dessert-spoonful every half-hour) in three cases of excessive vomiting of pregnancy.—*British Medical Journal.*

Original Articles.

PRACTICAL NOTES ON THE TREATMENT OF SKIN DISEASES.*

BY GEORGE H. ROHÉ, M.D.,

Professor of Hygiene and Clinical Dermatology, in the College of Physicians and Surgeons.

PIGMENTARY HYPERTROPHIES.

1. *Freckles.*

The sun's rays, acting as a stimulant through the peripheral nerve terminations, sometimes cause an over-production of pigment in the skin, which is collected in small roundish masses causing yellowish or brownish spots. These spots are called freckles, and they are more frequent in persons of blonde complexion. They are especially distributed on those portions of the skin covered by clothing, and are more noticeable in summer. The Germans call them *Sommerflecke* (summer spots). The discoloration is due, as above stated, to an increase in quantity of the normal pigment of the skin. The peculiar arrangement of the coloring matter is doubtless due to some action of the peripheral nervous system, which is not clearly understood.

Freckles are generally believed to disappear entirely during the winter season. Hebra has shown, however, that this is not the case, but that they grow so faint in the absence of strong sun-light that they are no longer noticeable.

These little pigmentary blemishes can hardly be looked upon as a disease, but from a cosmetic point of view they are undesirable possessions. Hence many persons, especially of the gentler sex, are anxious to get rid of them, and frequently apply to the physician for treatment. Inasmuch as the over-production of pigment cannot be checked by any means at our command, a radical cure cannot be promised. The affection is however amenable to palliative treatment. A number of applications may be used which will cause a temporary disappearance of the spots. Salicylic acid is one of the most effectual of these remedies. It is used in alcoholic solution or in ointment. The following are useful formulæ:

℞.—Acidi salicylici ℥ss.
Spiriti myrciæ ℥ii.
S.—Apply night and morning with a soft rag or sponge.

℞.—Acid salicylici, 3 ss.
Hydrarg. ammoniatæ, 3 i.
Ungt. aquæ rosæ ℥ i. M. ft. ungt.
S.—Apply at night.

During the day a lotion of corrosive sublimate (gr. j: ℥ i.) may be applied two or three times.

These applications will soon produce a slight scaling and roughness of the skin, which is easily subdued by glycerite of starch. Should the skin become red and irritated, the applications must be intermitted until the irritation subsides.

Should a stronger application be needed the following, recommended by McCall Anderson, may be tried:

℞.—Saponis viridis, ℥ ii.
Sp. vini rectificati ℥ i
Hydrarg. bichloridi, gr. vi.
Ol. lavandulæ gtt. x.
M. Solve et filtra.
S.—Apply at night and wash it off in the morning.

This will generally be found too irritant, however, for a skin that freckles. Glycerine lotion or glycerite of starch should be used during the day.

In slight cases the following lotion of borax and chlorate of potash answers the purpose very well.

℞.—Sodii boratis, 3 ii.
Potassii chlorat., 3 i.
Glycerinæ ℥ss.
Sp. vini rectif., 3 iii.
Aquæ rosæ q.s. ft ℥ vi. M.
S.—Apply with a soft sponge several times a day.

*About one year ago the author began publishing a series of practical lessons on skin diseases under this title, primarily for the benefit of the students attending his clinics at the College of Physicians and Surgeons. The little volumes have been so favorably received by the medical profession and press, that at the request of the editor of THE MARYLAND MEDICAL JOURNAL, the series will be continued in the pages of this publication.

2. *Chloasma.*

This is a very frequent affection occurring upon the face, especially in women suffering from disorders of the generative apparatus. It is rare in men. The common name for it is "moth patches." The affection consists of yellowish-brown or brownish patches on various parts of the face. The forehead, chin, temples, and lower portions of the cheeks are principally affected. There is neither desquamation nor infiltration, and no subjective symptoms of any kind are present.

The causes are obscure. It is known that the discoloration appears frequently during pregnancy, to disappear after parturition. It is also a frequent accompaniment of uterine and ovarian disorders, and often disappears when these troubles are cured. The relation of cause and effect is, however, not known.

Chloasma resembles very closely tinea versicolor, a discoloration of the skin due to a vegetable parasite. The latter, however, in nearly all cases occurs upon the chest, abdomen, arms and neck, namely upon those portions of the body covered by clothing. It is very rarely seen upon the face or hands. Chloasma, on the other hand, is almost entirely limited to the face. Tinea versicolor is slightly scaly and sometimes itches. Neither of these features are present in chloasma. Finally, the latter disease occurs nearly altogether in females after the age of puberty, and generally in those who suffer from some derangement of the generative organs. Tinea versicolor is oftener seen in males.

The treatment of chloasma consists in removing the uterine or ovarian disease, if any can be found, upon which the pigmentation depends, and in promoting the casting off of the superficial epidermal layer so as to bring a less pigmented stratum to the surface. For this purpose the applications recommended above for freckles will be found useful. The ointment or lotion of salicylic acid, or a lotion of corrosive sublimate 2-3 grains to the ounce may be used. Soft soap spread upon strips of muslin like an ointment, and allowed to remain upon the pigmented skin for several hours will produce a maceration and desquamation of the epidermis which often leaves the skin of a normal color after the redness has disappeared. The discoloration will however return unless the use of one of the ointments or lotions mentioned is continued.

The application which will give the most satisfactory results is an ointment of subnitrate of bismuth and white precipitate in the following combination:

℞.—Bismuthi subnitrat.,
Hydrarg. ammoniat., āā ʒ i.
Vaselini ʒ i. M. ft. ungt.
S: Apply to the discolorations at bed time, and remove in the morning with Hebra's *spiritus saponis kalinus.*

This ointment I have used in a large number of cases with uniform success. Sometimes it is a little too active and produces irritation of the skin. Its use must then be intermitted for a few days, or the ointment made weaker. Some skins can stand a much stronger application however, and I have used as much as two drachms of each of the active ingredients to the ounce of vaseline.

The effect becomes manifest in a few days after beginning its use. There is slight scaling and roughness of the skin, showing that a furfuraceous desquamation of the epidermis is going on. In the course of ten to fifteen days the skin has become much paler and if the application be continued the normal tint of the skin can be regained. This can, however, only be maintained by the continued used of the ointment unless the disease of the internal organs upon which the discoloration depends has been removed.

The pigmentation of the skin from sunburn usually soon disappears after the cause has ceased acting. The bleaching can be somewhat hastened by a lotion of corrosive sublimate in emulsion of almonds (gr. j : ʒ ii).

Permanent discolorations of the skin are sometimes produced by a mustard poultice or blister. Hence care should be taken to avoid making these applications to the face, or upper part of the

chest in women, as they may prove the source of an annoying or humiliating disfigurement in the latter. I have seen a number of cases in which the chest had become pigmented from mustard poultices, thus interfering with the wearing of dresses cut decolleté. To many women this is not altogether a trifling matter.

In these discolorations the use of the salicylic acid lotion above mentioned will prove useful. The prognosis must not be too sanguine however, as the pigmentation is liable to return.

In certain chronic cachectic conditions as cancer, tuberculosis, malaria, and Addison's disease there is often a local or general pigmentation of the skin. As a matter of course, in these cases, there can be no question of treatment of the discoloration.

Scratching, friction, pressure or constant irritation of the skin may be followed by localized pigmentations. Scars, especially those resulting from syphilitic infiltrations, also often leave dark spots and markings. They usually disappear without special treatment.

(*To be continued.*)

Selected Articles.

THE ABUSES OF MILK DIET IN THERAPEUTICS.*

BY ROBERTS BARTHOLOW, M.D., LL.D.,

Professor of Materia Medica, Therapeutics and Hygiene in the Jefferson Medical College; Physician to the Philadelphia Hospital, etc,

The therapeutical employment of milk not only has been popularized and the lay public made familiar with its various adaptations, but in the wake of the general appreciation has followed the usual exaggerations, and hence it is prescribed with little regard to the conditions properly requiring it. Under these circumstances it seems desirable to indicate the limitations of this therapeutical food, and to show wherein it may be hurtful rather than beneficial.

In certain disorders of the digestive functions, milk causes a sense of discomfort, decided uneasiness, oppression—sometimes even pain, and it prolongs the morbid condition. The cases of this kind may be grouped into two classes: those in whom the casein is the offending material; those who cannot properly digest the cream or butter. We find examples of the first class among children, but they are by no means uncommon in adults. They are detected the more readily in early life, because the curds are rejected by vomiting, or appear undigested in the stools. Adults unable to digest casein, or who digest it slowly or painfully, have epigastric distress, heaviness and oppression for several hours after meals, stupor and disinclination for exertion coming on after an hour or two and continuing until the offending material has passed well down the intestines.

An excellent substitute for the milk when the casein disagrees is barley-water with cream. The barley-water should be carefully strained and have the density of good skimmed milk, and one-sixth or one-fourth cream added, so that the mixture has the consistency of rich milk.

The second class of subjects to whom milk is unadapted are the cases of duodenal, hepatic and pancreatic diseases, because of the deficiency in the secretions necessary to the process of emulsionizing fats, and preparing them for entrance into the lymph vessels. Fats decomposing form very irritating fat acids, and the change in the reaction of the intestinal juices is the cause of various secondary troubles in the biliary function and elsewhere. To fit milk for use under such circumstances, it must be skimmed, and about the time the stomach digestion is completed, aids to the intestinal digestion should be administered. Such aids are a soda alkali and it may be, some pancreative solution to effect complete digestion of the fatty constituents.

The mere bulk of the milk is an objection to its use in certain diseases. In dilatation of the stomach, the space occupied by the necessary quantity perpetuate the disease. The reflex effects of distension of the stomach in cases of

*From *Journal of Reconstructives*, July, 1887.

weak heart, and in angina pectoris, may not only cause distressing symptoms, but may even prove fatal. It cannot be too strongly stated that milk is a highly objectionable aliment in heart disease, whenever the motor apparatus of the organ is diseased, and whenever its movements are readily influenced by morbid states of the stomach through the reflex channels.

I no malady, as I conceive, is milk more abused than in acute rheumatism. It is very often then the chief—sometimes the only aliment employed during the whole course of this disease. Besides the objection inherent in its mere bulk, certain theoretical considerations of its nature should have considerable weight in deciding the question of use. The very obvious objection that milk furnishes lactic acid as a product of its fermentation, should not be ignored. All the world knows the intimate relation between lactic acid and the rheumatic poison. By the introduction of lactic acid, a form of endocarditis not distinguishable from the rheumatic, is set up, and of those diabetics treated by lactic acid, a considerable proportion suffered from attacks of rheumatic fever (acute rheumatism). It is difficult, of course, to determine this point with certainty, but I have reason to believe that patients with rheumatic fever do not get well so quickly, and are much more apt to have relapses when they consume much milk during the course of this disease. Surely, sufficient reasons exist for undertaking a thorough investigation of the question. My own practice, in the cases in which I am consulted, is to advise against the use of milk as an aliment in acute rheumatism.

In typhoid fever, milk is one food now given, irrespective of the character of the cases. Of late this almost universal practice has come to be challenged. It has been depended on, without investigating the state of the digestive functions, and quite unmindful of the effect it may have on heat production. It is often given in too great quantity at a time, or so frequently that the stomach has not disposed of one quota before another is thrust upon it. Unless the gastric juice has preserved a to a considerable extent its power of converting the albuminoids into peptones—which we have no right to expect—the casein resists its action; hence it follows that materials of digestion should be administered soon after the milk is taken, and to prescribe without reference to the ability of the stomach to dispose of it is to insure increased fever and delirium, and more frequent stools. Besides supplying the means for proper digestion of the milk, attention should be given to its administration at such intervals that every portion given may be disposed of before another is permitted to enter the stomach. It is a trite observation, which is not therefore less true, that it is more important to the nutrition if some food be well digested rather than a large amount be merely swallowed.

Notwithstanding, since Donkin's first reports, milk has entered largely into the dietary of diabetics, its utility has recently come to be seriously questioned. If conversion of milk sugar into grape sugar does not take place, there can be no doubt of the value of milk in this disease, since it possesses so great a number of alimentary constituents. If, as is now asserted, this conversion does take place, the free administration of milk in diabetes, must be regarded as an abuse.

PLASTERS IN THE TREATMENT OF SKIN DISEASES.*

BY WYNDHAM COTTLE, M.A., M.D., OXON., F.R.C.S. ENG., M.R.C.P. LOND.,

Surgeon to the Hospital for Diseases of the Skin, Blackfriars.

Of late years one of the most generally used methods of local treatment of skin-disease, especially eczema, had consisted in enveloping the affected portion of the skin in pieces of soft material such as muslin, thickly spread with diachylon ointment soaking through, the whole dressing being held in position by a firmly applied bandage. Previous to the application of the ointment as de-

*From *British Medical Journal*, July 16th, 1887.

scribed, the affected part may have been treated by free use of soft soap or other stimulating measures. This dressing was to be renewed morning and evening and it was a point of the first importance that the ointment should be thickly spread, and that the pieces of rag covered with it should be applied evenly and in close contact with the skin, and that there should be no delay between the use of the soap, if employed, and the subsequent application of the ointment. I need scarcely call to mind that diachylon ointment is made by boiling litharge with oil in the presence of water.

When I first employed this method of treatment, I encountered considerable difficulties. In the first place it was not easy to obtain the ointment uniformly made. Sometimes it was deficient in cohesion and apt to crumble, or it was so hard that it would not spread unless partially melted, or it was so soft that the heat of the body rapidly liquefied and soaked away, often saturating the clothing of the patient, and penetrating through the rags and bandages which had been placed over it. Again, patients and their attendants did not like the trouble of spreading the ointment, and they were apt to put it on either too thickly or too thinly, since it requires some mechanical skill to spread ointment uniformly.

It seemed to me that many if not all these difficulties would be removed, and some additional advantages gained, if it were possible to obtain the ointment ready spread on some suitable substance and of such a consistence that it would not liquefy at the temperature of the body, and the same time possess some adhesive qualities. After experiments in this direction extending over some years, I succeeded in obtaining a plaster of the same constituents as diachylon-ointment and this plaster fulfilled the essential conditions of being sufficiently adhesive to make it adhere to the part to which it was applied; its melting point was such that it did not liquefy at the ordinary heat of the body; and being spread upon substances as deficient as possible in elasticity and stiffness, it readily took the shape of the part to which it was applied, its adhesiveness keeping it in close contact with the skin. The plaster is dull white, about the thickness of the back of a table knife, and is spread either upon paper, or on a paper made of palm-fibres, or upon thin kid or strips of muslin. In cold weather the surface of the plaster may need to be slightly warmed before the fire or firmly pressed on the skin if it is wished to make it adhere readily. Care must be taken in warming the plaster not to melt it. Before putting it on, all crusts, scales, etc., must be removed from the affected parts, either with the soap treatment or other means, in the same manner as before applying diachylon-ointment spread on rags. The skin to which the plaster is to be applied having been carefully dried, and the plaster being cut so as to slightly overlap the part which it is to cover, it is to be firmly pressed on the skin, when it will adhere sufficiently to maintain its position.

If the part is discharging, it is advisable to put on a new piece of plaster two or three times daily, the part being thoroughly cleansed, washed, or bathed with lotion in the same way as when diachylon-ointment is used. In cases where little or no discharge is present it will suffice to put on a fresh piece of plaster once or twice daily, removing the discharge, if any be present, before putting on a fresh piece. If there is no irritation and the part is quiescent, the same piece of plaster may be left untouched for two or three days or a week. The plaster itself gives some mechanical support to the skin to which it is applied, which has a remedial action. If it is desired to give a part a more pronounced support, a bandage can be placed over the plaster in the way in which it is applied to a limb dressed with diachylon-ointment. For the limbs if it is desired to envelop the whole limb, the most suitable form of plaster is that spread on strips of muslin, which can be applied overlapping one another, and crossing in front, in the same way as limbs are usually straped with diachylon-ointment.

One of the advantages of plaster over ointment spead on rags is that, by its own adherence, it will remain applied to parts to which is difficult to keep ointment in close contact. The plaster which I have had made will maintain its position without the aid of bandages, etc.; for example, on the face (especially in children), round the neck, under the arms, in the flexures ot the elbows and knees, on the wrists, the palms or back of the hands and fingers, and, of course, on any part of the body. In cases of eczema, the groins, and penis, and scrotum can often, with advantage, be enveloped in it spread on thin kid. In parts exposed to much friction, such as the wrists or hands, the plaster will last longer if protected by a glove or piece of bandage. The plaster on muslin is neither detached from the skin nor destroyed by immersion of the part in cold water.

The conditions of disease in which such plaster can be used with the greatest advantages are those in which spread diachylon-ointment is of so much service. This is chiefly eczema. In eczema of the palms and soles, and in the drier forms of this disease, it has, in my experience, proved especially useful. In most cases of this complaint in the flexures of the limbs it gives comfort and causes rapid amendment, while in eczema of the neck and of the groins, scrotum, etc., it will often give relief, and remove the disease when other local measures have failed; and it takes away the necessity for the galling and inefficient bandages and supports that are required to keep dressings in position in cases of this distressing complaint on the lower part of the body and under the arms. It can also take the place of the cumbrous and unsightly masks spread with ointment in which it is sometimes found necessary to enclose the faces of children suffering from eczema. The plaster can also be used in other complaints in which spead diachylon-ointment is serviceable, such as sycosis, very inflamed psoriasis, etc.

From some years past I have used the plaster I describe in a large number of cases of cutaneous disease, and I have found it very useful, many cases of eczema in the hands and lower part of the body yielding to this treatment when other measures had failed. The form of plaster I now use has only been arrived at after repeated experiments and modifications. Any drug the action of which is desired can be incorporated in the diachylon-ointment plaster, in the same way as it can be with diachylon-ointment, but it must not be of such a kind as to combine chemically with the lead base of the plaster.

The advantages of this plaster are:

1. Its ease of application.

2. Its healing and soothing influence principally in cases of eczema—especially in its less acute forms—retaining the remedial action of diachylon-ointment without its inconveniences.

3. The mechanical closeness of its application to the skin.

4. No additional means are required to keep this dressing in position, but can be used with it if required.

5. Its neatness, cleanliness and cheapness.

Abstracts and Extracts.

Sanitation of the Lying-in Chamber.—At a meeting of the Academy of Medicine in Ireland, Boxall, in a paper dealing with the above subject, pointed out that much of the illness following delivery was essentially of a preventable nature. It is not the mortality alone which should be taken into account. Those minor ills of the puerpera, the outcome of less fatal attacks, must be also included. Septic poison can only be produced within the passages where air is permitted to enter, or any decomposable material is left behind; for both the presence of air and a suitable nidus are essential to decomposition. A special liability, however, exists of the poison, ready made so to speak, finding an entrance from without. Dr. Boxall urged the importance of inquiring into the antecedents of the nurse, with a view to ascertain if she had been nursing or otherwise brought into contact with any person suffering from sep-

ticæmia or pyæmia, burns, abscesses, or acute specifics. If exposure have occurred, he advised a complete change of clothing, and a general carbolic or iodine bath. He regarded as the most important element in antiseptic midwifery the thorough washing of the hands with soap and water, including the use of the nail-brush; but he further advised the soaking of the hands and wrists in strong antiseptic solution (sublimate 1 in 1000, or carbolic acid 1 in 20) immediately before making any examination, performing any obstetric operation or touching the genitals of the patient. Second only in importance to this was the thorough washing and subsequent disinfection of all instruments and utensils employed. The abolition of sponges, and the employment of cotton-wool or tow in place of napkins, he thought beneficial in every way. Special inquiries should be made into the sources of all articles passed on from one patient to another, such as binders and mackintosh sheets. Parish bags in use among the poor should always be regarded as likly to contain assorted samples of infection. The condition of the drains should be carefully ascertained, and any defects remedied long before the expected date of the confinement. Too little attention was frequently paid to this point, and also to the subject of ventilation. A fire should be kept burning in the grate, and one window at least opened a few inches at the top. With regard to the choice of antiseptic agents, he urged the advisability of employing one of universal applicability rather than several, more especially when incompatibility exists. Sublimate is incompatible with soap (hence the hands must be well rinsed before they are immersed in the solution) and with oils (hence sublimated glycerin or vaseline should be substituted for carbolic oil or lard, as a lubricant); carbolic acid is incompatible with Condy's fluid, which, again, is decomposed by soap, while iodine enters into combination with the alkali contained in it. These are points which are frequently overlooked. Whatever antiseptic be used, the strength should invariably be measured accurately, for if the proportion be merely guessed at, not only may the solution be so weak that its sepsis-destroying properties become much deteriorated or are quite destroyed, but, on the other hand, it may be so strong that great danger may result, either locally to the living tissues or generally by absorption, especially when the more powerful agents are employed in the form of douche after delivery. For the hands and instruments he advocated the invariable employment of corrosive sublimate (1 in 1000), or carbolic acid (1 in 20): solutions of the same strength to douche the vagina in every case during the first stage of labor, and after labor subsequently to douche the uterus also, where any intra-uterine interference or foul discharge from the cervix specially indicated such a proceeding. But after the first douche the solution might usually be reduced to half the strength. The sublimate douche frequently administered was not unattended with danger, and he would never advise its use unless the patient were under constant observation. In ordinary cases, when the douche was given as a routine practice, he considered Condy (color of claret) or boracic acid (saturated solution) of sufficient potency. While he invariably advocated the douche (giving morning and evening till the lochial discharge ceases, at from 110° to 115° F.) as a routine practice when the services of a competent nurse are available, he felt sure that in the hands of an ignorant woman more harm than good might ensue. In such a case it was advisable to trust to the more simple details necessary to insure thorough washing and disinfection of the hands and instruments, the exclusion of all sources of infection and of decomposition from, and free ventilation of, the lying-in chamber, and to limit the employment of the douche to the labor, unless special circumstances dictated its subsequent use, and then it should be performed by the doctor in person or under his immediate supervision. Intra-uterine irrigation should never entrusted to the nurse, however efficient she may be.

Dr. Ingle thought Dr. Boxall must

have selected an unusual season or place for the statistics given. He did not think the experience of private practitioners would furnish anything near such an estimate, but rather evidence wholly to the contrary. Effort after such sanitation as had been described by Dr. Boxall might be of service in lying-in institutions, with trained skill and careful medical oversight; but in general practice he thought it undesirable that much interference with the parturient should be encouraged other than great cleanliness. Injections of vagina, except specially needed, were rather to be discouraged, as involving many risks.—*The Lancet*, June 18, 1887.

Pruritus of the Female Genitals.—The following formula is recommended by Meigs for pruritus vulvæ:

℞ Baracis.....℥ iv
Morphinæ hydrochlor.....gr. vi
Aquæ rosæ.....℥ viss
M. Sig.—Bathe the parts affected.

Between the applications, lycopodium or starch flower may be dusted upon the affected parts.

Vaneedem's prescription is:

℞ Chloroform.....
Sulphuris.....
Sodii carbonatis.....āā....℈ iv
Morphinæ acetatis.....gr. vi
Vaseline.....℥ v
M. Ft. ungt. Sig.—Rub upon the parts.

Lebert's formula is as follows:

℞ Hydrargyri bichlor..gr. viij–gr. xvi
Spt. camphoræ.....f ℥ viiss
Aquæ destill.....f ℥ x
M. S.—Bathe twice daily with the lotion.

For pruritus of the perineum, Hancke gives the following prescription, to be applied by the means of a sponge every two hours. For pruritus of vulvæ, dilute four-fold:

℞ Iodi.....gr. xv
Potass. iodidi.....gr. xl
Dissolve in aquæ dest.....f℥ v
Add alcohol dil.....℥ viiss

Pleuck's salve for pruritus pudendorum is made of the following:

℞ Ungt. hydrargyri nitratis....℥ viiss
Hydrargyri oxidi rub.....gr. xx
Adipis.....℥ iv
M.—Ft. ungt.

Cazenave prescribes:

℞ Zinci oxidi.....℥ ss
Camphoræ.....gr. viii
Amyli.....℥ viiss
M.—Ft. pulvis. Sig.—Dust upon the parts.

Dr. Thomas, in cases of pruritus due to vaginal leucorrhœa, advises vaginal injections of the biborate of sodium in solution, and once or twice a week he cleanses the cervix thoroughly of mucus, and applies the nitrate of silver occasionally; chemically pure nitric acid is used with the hope of altering the secretion. Copious injections of water are continually used, and a suppository of cocoa-butter containing gr. v. of tannic or gallic acid, is placed against the cervix twice daily.

Trousseau recommends a solution of carbonate of potassium (℥iii–f℥iv) for pruritus vulvæ. A formula advised by Fox is as follows:

℞ Acetate of ammonia.....℥ j
Dilute Prussic acid.....℥ iss
Infusion of tobacco.....℥ viij
M. Sig.—To be sponged on the part twice a day in pruritus ani or p. vulvæ.

Bartholow recommends the following lotion:

℞ Hydrargyri chlor. corros.....1 part
Alum.....20 "
Starch.....100 "
Water.....2500 "

In case the pruritus comes from the presence of animal parasites, a mercurial treatment is advisable. The black or the yellow wash, or mercurial ointment may be used. The common sulphur ointment is powerful enough to kill the ordinary *Acarus scabei*.

Another formula of Thomas is very desirable as a vaginal injection and wash for the vulvæ:

℞ Plumbi acetatis.....℥ ij
Acidi carbolici.....℈ ij
Tinct. opii.....f℥ j
M. Aquæ.....O iv

Another topical application of demonstrated value is:

℞ Bismuthi subnitratis.....
Acaciæ pulv.....āā..℥ij
M. Sig.—Add water to the consistency of cream, and apply frequently with a brush.

The following is also excellent:

℞ Pulv. acaciæ.....℥ ij
Bals. Peru.....f℥ j
Ol. amygdalæ.....f℥iss
Aquæ rosæ.....f℥ j
M.

And the following will be found an excellent lotion:

℞ Acidi carbolici.....℥ ij
Glycerinæ.....f℥ j
Aq. rosæ.....q.s.ad..f℥viij
M.—Ft. Lotio.

It must not be forgotten that diabetic urine often produces obstinate and severe pruritus, so that examination of urine is always advisable in such cases.

Hysterical or neurotic pruritus is best treated with a four per cent. solution of hydrochlorate of cocaine.—*Med. and Surg. Rep.*

Treatment of Acute Dysentery.—The inflamed edematous condition of the mucous membrane, and subsequent obstruction to passage from the bowel, is well known. Remembering the relief often obtained from the application of hot water to inflamed surfaces, and the beneficial effects of solution of bichloride of mercury upon ulcerated surfaces, particularly of mucous membrane, the thought occurred to me that if I could carry the hot water into the bowel, allowing it to flow back in sufficient quantity to remove for a distance from above all fecal and offending matter, I should accomplish two important objects—*i. e.*, relief of pain, and prevent absorption of poisonous matter up into the blood, the antiseptic properties of the bichloride aiding in this latter object. Upon this I acted, using a soft rubber tube attached to a Davidson's syringe, passed carefully through this sensitive inflamed tissue, so as to carry the liquid above the rectum into the colon. The patient was placed on his side, with an oil-cloth beneath him, and four or five quarts of water as hot as could be borne were injected and allowed to flow back with whatever substance had accumulated or remained in the bowel above. When the water returned clear, then a quart or more of the solution of bichloride, about 1 to 10,000, was injected and allowed to return in the same manner. The effect was immediate relief of pain and tenesmus. A suppository of opium, one grain, was given and retained; and for the first time after the attack, the patient slept seven hours, awakened refreshed, could take some food, and, if perfectly still, was free from pain. In about twelve hours slight return of pain was felt, and the same treatment repeated. This treatment was continued, with the bichloride solution, four times and the hot water alone was used for four or five days more, with suppositories of one grain of opium, morning and night, with perfect recovery no medicine being administered by the stomach, except one-grain doses of quinine, three times per day.—*Dr. Fordyce, Buffalo. Med. and Surg. Jour.*

Case of Suprapubic Lithotmy in a Child. — William Sykes, M. R. C. S., *British Medical Journal*, July 2, 1887-says: As few cases of suprapubic lithotomy in private practice have been reported, I venture to send the following, declaring at the same time my opinion that, from the comparative simplicity of the operation and from the generally good results obtained, it is destined to replace the lateral operation, in the same way as it was itself replaced by the latter.

J. T., aged 9¼ years, but looking not older than 6, with lateral curvature of the spine and a strumous appearance, came under my care in November, 1886. He was suffering from all the usual symptoms of stone in the bladder. The urine was loaded with pus and mucus, and the child seemed in great pain. The history of the symptoms extended over two years. On sounding, a stone was felt; indeed, the sound had some difficulty in entering the bladder, as it at once impinged on the calculus, which appeared to be fixed.

I operated on November 25th, making the incision of the length recommended by Sir H. Thompson. I found that the bladder was not sufficiently distended, and had to make my final incisions dangerously near the peritoneum. I had no difficulty in extracting the

stone between my two fingers when once I had entered the bladder. There was very little hemorrhage. I put only one suture in the upper part of the wound, and I afterwards regretted placing this one in, as it caused some dragging. The wound was dressed with lint dipped in carbolized oil, merely laid on and frequently renewed during the first three days; afterwards only changed night and morning, and moistened externally with the oil.

For the first week the urine passed exclusively through the wound, then began to come through both the natural and artificial passages, and finally ceased to trickle from the wound about one month after the date of operation. The wound itself, however, took on the appearance of a strumous ulcer, and did not finally heal until January of the present year.

The stone was phosphatic, of the dumb-bell shape, with one end much larger than the other. It appeared as though it had been tightly grasped in the middle, and the resistance to the passage of the sound gave one the same impression. It weighed, when dried, a quarter of an ounce.

Remarks.—The only difficulty in the operation was caused by the bladder not rising sufficiently over the pubes, owing to insufficient distension. The ivory instrument recommended by Sir H. Thompson for tearing the connective tissue could have been well dispensed with, and is of an unfair cost. After enjoying fair health and entire freedom from any difficulty with the bladder until the beginning of the present month (June), the child was attacked by broncho-pneumonia, and died from that disease, having only been ill three days.

A Case of Renal Hydatids Treated by Abdominal Section.—Dr. Francis Imlach, in *Brit. Med. Journal*, July 2nd, 1887, says: When hydatids grow in either kidney the tumor may burst into the renal pelvis, and the cyst-walls, together with their fluid contents, be discharged *per urethram*. This discharge may quickly cease or it may continue for years, and end in extensive renal suppuration. But if the hydatid tumor grows as large as an orange, or, at the most, as large as the adult head, rupture into the peritoneal or pleural cavity appears to be its usual course. Rupture into the peritoneum may cause rapidly fatal suppurative peritonitis, though by a more chronic process, of which I have seen an instance, the peritoneal cavity may become filled with thick fluid, like pea-soup. In either event, incision, free irrigation, and draining are obviously indicated.

The case I have to record is one in which a renal cyst grew to the size of the uterus at full term, and so closely resembled it that before operation repeated stethoscopic search for the fœtal heart-sounds was made. The patient, who was 43 years old and thrice married, had a child at 18, but none since. She made a bad recovery, thinks a lump appeared in her abdomen soon after childbirth and that her tumor grew from this lump. During the past eight months menstruation had entirely ceased and the abdominal tumor had increased rapidly. On admission to the Liverpool Hospital for Women, to which at that time I was attached, the tumor was smooth, oval, and tense, and not at all like an enlarged kidney. It was mobile; on its left side was an outgrowth resembling a small cystic ovary, and its right side a similar but smaller nodule. There was dulness in the left flank, while the right flank was resonant. The sigmoid flexure of the colon passed in front of the tumor, and it was only this circumstance which seemed against the diagnosis of fibro-cystic uterine tumor. There was no hydatid fremitus. *Per vaginam* the tumor was apparently continuous with the uterus, but the cervix was not soft, as in pregnancy.

On August 3rd, 1885, an exploratory incision was made in the middle line of the abdomen. The exposed mass looked like medullary cancer of the uterus, but when its wall, which was half an inch thick, was punctured with a trocar fluid clear as spring water poured out, and the diagnosis became plain. After a free incision of the cyst wall with scissors hosts of hydatids spurted out,

many of them as large as Tangerine oranges, a multitude about the size of hazel-nuts, and others smaller. Renal tissue was discernible in the cyst wall, and it became evident while removing the last of the hydatids, that the tumor occupied the region of the left kidney. The empty capsule was stitched to the abdominal wall, a drainage-tube inserted, and dry dressing applied. For a few days the urine was black like porter, but then it cleared, the patient made a capital recovery, and remains perfectly well.

Scarlet Fever and its Treatment.—Clement Dukes, M.D., London, writes to the *British Medical Journal* July 9th, 1887.—The Journal of June 11th, 1887, contained a valuable article by Drs. Jamieson and Edington on "A Method of Prophylaxis, and an Investigation into the Nature of the Contagium of Scarlet Fever." They have proved that the specific cause of scarlet fever is a bacillus, which they have cultivated, and with which they have inoculated animals and produced scarlet fever. They have also shown that this bacillus occurs in the blood during the first three days of the fever; that, later on, it is absent from the blood; and that it is found most extensively in the desquamating skin after the third week. They have, further, indicated a method by which this bacillus can be destroyed in the skin, and thus the spread of the infection of scarlet fever can de minimized, and the unprotected, even while residing in the same house, be safe from falling into its trammels.

But a still more important matter is the treatment and arrest of scarlet fever in each individual; for the first cry of a parent whose child has scarlet fever, is, "What can you do to save my child; and how can you spare him from becoming maimed for life by its sequelæ?" his second question being, "How can you prevent its spreading to my other children?" This second question Drs. Jamieson and Edington have answered. It is with the hope that I may induce them to investigate the first question that I am writing this paper; for it has already been brought within a measurable distance of being answered by Dr. Illingworth, of Accrington, who, in a letter in the Journal for May 1st, 1886, stated that the biniodide of mercury ($Hg I_2$) is a specific for scarlet fever. Recognising the importance of his letter in the use of mercury as a germicide, I resolved to administer the drug at the earliest opportunity. I have now given the $Hg I_2$ in several cases of scarlet fever—with this result, that it not only arrests the fever, but it prevents the desquamation of the skin, or arrests it to such an extent that only a slight scurfiness of the skin of the hands and feet arises. If such be found to be invariably the case, will the bacilli of scarlet fever be found in the skin at all; and, if not, will not the infectious period of scarlet fever be thereby reduced to a few days only, and will not the sequelæ of scarlet fever be absolutely prevented?

The $Hg I_2$ can be administered in the form of a pill or as a mixture of the liq. hyd. perchloridi c. pot. iodid. The only drawback to its use which I have at present found is that if it be given before the diagnosis is absolutely certain, the physician will be apt to think, when he finds no desquamation taking place at the usual time, that the case was not one of scarlet fever. The drug prevents the desquamation of the epithelium of the tongue, as well as of the skin, and the throat rapidly heals under its use.

I was busy collecting facts when Drs. Jamieson and Edington's valuable paper appeared, and I should have waited until I had collected a sufficient number of instances before writing this paper had it not been for the desire that others, especially the above-named authors, would assist in establishing, or refuting, this treatment, for the experience of one individual is limited.

The benefit to be obtained from the use of $Hg I_2$ is far-reaching if it be reliable in all cases, for it not only prevents the desquamation of the skin, and thereby probably prevents the major part of the infectious nature of scarlet fever, but it will probably also be found that it obviates the necessity of keeping patients in bed for three weeks, which

is the only safe rule hitherto, and isolated for five or six weeks, and will prevent the occurrence of the much-dreaded sequelæ.

The gist of the whole matter seems to be this: 1, that if the bacilli of scarlet fever are only discovered in the blood for about three days; 2, that if the bacilli, after this date, chiefly occupy the desquamating cuticle; 3, that if this desquamation can be prevented altogether by a medicine which destroys bacilli; 4, then, in all probability, the infection of scarlet fever will only last a few days, and we are within a measurable distance of limiting the spread of scarlet fever, and of removing its fangs by preventing the sequelæ.

The Treatment of Gonorrhœa by Injections of Iodoform Oil. — Dr. Thiéry (*Le Progrès Medical*, March 3, 1887,) says, that amongst diseases of the genito-urinary tract few have called forth methods of treatment at once so numerous and so inefficient as gonorrhœa, and this multiplicity itself shows the difficulties to be encountered by the physician when he undertakes the care of this malady, so common and so productive of grave consequences. The patient demands prompt relief, and the aim of the physician is not only to accomplish this but to secure a radical cure.

Now, gonorrhœa left to itself tends to spontaneous resolution, and although a bacteria disease, it has a well-marked cyclic evolution and is often seen to get well without any treatment. This, however, is the exception, largely because of the imprudence of the patient, whose excesses cause the gonorrhœa to pass into a chronic state, and it is this chronic gonorrhœa which is so frequent and so rebellious.

Three methods of treatment may be employed. The expectant which sometimes succeeds; the emollient followed by balsams, and the abortive. We employ at the Midi Hospital the second method in preference to the others, from having observed its good results, and we do not hesitate to say that the treatment, properly carried out, almost always succeeds when the patient can be managed and is desirous of a complete cure. The following is the plan followed:

In the first period. 1. Patients are absolutely forbidden to drink beer, coffee, liquors or white wine, or to visit women, and are to be cautioned about touching the eyes with the hands.

2. Three times per week they are to take a full bath of an hour's duration.

3. Water colored with red wine may be taken with meals, but no other drink is allowed. Each day, between meals, a quart of water is to be drunk, in which forty-five grains of bicarbonate of soda has been dissolved.

4. A suspensory bandage is to be worn.

Second Period. 1. The same rules are to be observed as laid down under Section 1 of preceding rules.

2. The baths and bicarbonate are to be omitted and no liquid is to be taken between meals.

3. Six large pills of the following confection are to be taken each day:

℞.—Pulv. Cubebæ.
Pulv. Copaviæ āā ʒ j.
Magnesiæ q.s. ut. Confect.

If all these conditions are filled, and if the directions are carried out in all their details, and all the deprivations which they entail are put up with, success may be guaranteed. Wine and women have however such strong attractions for the hospital population (and they are so urgent in their demand for a speedy cure, that abortive treatment was introduced). This, however, is painful, and in inexperienced hands dangerous, and in most cases should be rejected.

The author, after using bichloride, nitrate of silver and other injections, has met with greater success in the employment of iodoform suspended in oil, a means of treatment which he characterizes as "active, rapid and absolutely innocuous." After trying saturated solutions of iodoform in ether, which were found too painful, a mixture of ether, iodoform and oil of sweet almonds was used, but both were given up in favor of

a simple suspension of iodoform in the oil. About two drachms are injected in the usual way, after urinating, and retained for some time in the canal. The claim is made that iodoform adds to the antiseptic and microbian action an analagesic property which is of great value.

The odor of the drug is found to be sufficiently hidden by the addition of vanilline, coumarine, or spirits of eucalyptus.

Six cases are reported which were treated in the manner described; five were completely cured in from five to twenty-eight days, and the sixth was nearly well on the sixth day of treatment, when he left the hospital, making an average of thirteen days. From eight to twenty-nine injections were given.—*Jour. of Cut. and Genito-Urinary Diseases.*

INTERNATIONAL MEDICAL CONGRESS NOTES.—*The Journal of American Medical Association* calls attention to the following: "The Congress will consist of such members of the regular medical profession as shall have registered and taken out their tickets of admission, and of such other scientific men as the Executive Committee of the Congress shall deem it desirable to admit." The fee has been fixed at ten dollars. Each member of the Congress will be entitled to a copy of the Transactions.—*Rules of the Executive Committee.*

Those about to register will please read and give attention to the following directions to secure accuracy in the list of members of the Congress; and, to prevent mistakes therein, it is especially requested that all proper names of persons and places shall be written distinctly and in full, and without abbreviations in any case. (*For example:* Instead of J. W. Taylor, of Phila. Pa., it should be written John Warren Taylor, Philadelphia, Pennsylvania, etc., etc.) By order of

COMMITTEE OF ARRANGEMENTS.

Register No.....

FORM TO BE FILLED UP BY APPLICANT FOR MEMBERSHIP IN THE CONGRESS.

Data Required:

Name in full.....
Post-Office Address.....
If in a city, give also street and number.....
If in the country, give also name of the county.....
State.....
Province.....
Country.....
If a Delegate, state from what country or society.....
Practice general or special.....
If special, name the branch.....

CONCERNING A COMMEMORATIVE MEDAL.

As former International Medical Congresses have been commemorated by suitable medals, it is proposed (should a sufficient number be subscribed for) to have one of good size and proper design struck for the IX Congress. A medal with the head of George Washington on the one side and the seal adopted for the Congress on the other, would doubtless be appropiate. The medal of the London Congress had the bust of the Queen on one side and the seal of Congress on the obverse, and cost one guinea. Such a medal, well executed in bronze, will cost us five dollars. Those approving the project and desiring such a medal will deposit five dollars with treasurer, who will give a receipt for the same, and deliver the medal in proper time if struck.

Blank form to be filled:

Name in full.....
Post-Office Address.....
Number of medals subscribed for...

If from any cause the medals should not be struck, the money will be returned to subscribers.

France has a population of 40,000,000 with only 15,000 physicians. Yet it is said these men are so poorly paid for their services that the average general country practitioner can only make an annual income of from $500 to $1,500

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, AUGUST 6, 1887.

Editorial.

EVERGREEN FORESTS AS A THERAPEUTIC AGENT IN PULMONARY PHTHISIS.—The discovery of the bacillus tuberculosis and its almost general recognition as a causative agent in the production and dissemination of pulmonary tuberculosis have almost completely revolutionized the treatment of this disease. Without knowing the exact nature of the influence of climate upon pathological processes many writers upon climatological subjects seem to agree that the chief benefit which comes from the climatic treatment of pulmonary phthisis is to be attributed to the purity of the atmosphere. The air breathed in all large cities, or densely populated sections of the country,they argue, is laden with organic germs, or decomposing substances, either animal or vegetable, which are believed to be productive of disease, especially in those predisposed; hence to escape the injurious influence of these germs or bacteria an atmosphere or aseptic in character is desirable. Upon this theory the air of the country is purer and better for those predisposed to phthisis than that of large centres of population. But considering the fact that the atmosphere ordinarily breathed is disseminated over wide areas of country and that germs multiply rapidly, it will be found difficult to find an aseptic air in any habitable section of the globe. Extreme cold and high altitudes are believed to be destructive to germs, but in such localities where these conditions prevail it seems almost impossible to support human life without serious injury to other bodily functions. Clinical experience seems to teach that an atmosphere strictly aseptic has a less powerful curative effect upon ulcerative and suppurative processes than one in which the aseptic condition is due to the persistent presence of some antiseptic agent of sufficient power to destroy existing septic germs. For example the sea air is antiseptic by reason of the bromine and iodine it contains; the air of high altitudes is aseptic because it contains no germs. Were it possible to render the air we breath strictly antiseptic, diseased germs would either disappear or multiply so slowly as to do comparatively little injury. As this is manifestly impossible, can the diseased patient be removed to such an atmosphere? This is a question which climatologist are trying to answer. It is believed by many of them that atmospheric conditions are more favorable in one place than another, and, hence, from Maine to Florida, from the Atlantic to the Pacific innumerable localities, presumed to be favorable to the tubercular patient, are vaunted by high authority. The question which each consumptive patient will ask is, Shall I seek the everglades of Florida or the dry cold climate of Minnesota, the elevated atmosphere of Colorado or the evergreen forests of New York or North Carolina? In no small number of cases the interrogator of this question will attempt in person to test the virtue of all of these localities and should he survive the ordeal he will most probably add his testimony in favor of the locality last visited. With him it will be *post hoc propter hoc.*

The climatic treatment of pulmonary tuberculosis is a serious question. No conscientious practitioner can dismiss his tubercular patients to a climatic resort without feeling a grave responsibility. He will oftentimes question the correctness of his advice and wish that he could recall the same. In view of the great number of cases of pulmonary disease which yearly seek to be benefit-

ted by climate, who leave home, friends and many comforts to battle with disease under new conditions, any valuable contribution to this subject must attract attention. At the meeting of the American Climatological Association, held in this city a few months back, a paper was read (see *Medical News*, July 23, 1887) by Dr. A. L. Loomis, of New York, having the title given to this article. In this paper Dr. Loomis expresses the opinion, which is based upon his own observations, that evergreen forests have a powerful purifying effect upon the surrounding atmosphere and that it is rendered antiseptic by the chemical combinations which are constantly going on in them. The belief in the curative effects of the atmosphere of pine forests, Dr. Loomis well observes, is an old one and has long been held not only by physicians, but the non-professional public. Whilst various attempts have been made to explain how the beneficial effects of these forests are secured, the probable explanation is found in the emanations from such forests which render the air not only aseptic but antiseptic. What this antiseptic agent is the chemical laboratory has not been able to supply, but it is probable that it is the product of the atmospheric oxidization of turpentine. In support of this view Dr. Loomis cites the fact that the turpentines alone have been regarded as of special service in the treatment of all forms of catarrh, especially catarrh of the respiratory surfaces. It is quite well-known that the atomised solutions and vapors of turpentine are of decided value in diseases of the respiratory organs and have been constantly used in this class of cases. Turpentine is not only a powerful deodorizer and antiseptic, but its local and constitutional effects are those of a powerful germicide as well as stimulant. The presence of this turpentine vapor in the pine forest cannot be questioned. Whatever benefit is derived from the inhalation of this pine forest atmosphere must in the absence of any other known cause be referred to the presence of the turpentine vapor. How this atmosphere can arrest tubercular processes is not difficult to understand in the light of our present knowledge.

It has been well shown that the putrefactive processes within the pulmonary tissue are due to or accompanied by the presence of bacteria, which by their presence induce a destruction of tissue and a septic poisoning which sooner or later destroy life. Any agent which will destroy these bacteria, render them inert or arrest the putrefactive changes which are going on will exercise a beneficial influence upon the disease. Antiseptic inhalations act in this way; they virtually wash out the septic lung cavities, arrest septic absorption and for the time being stay the progress of the disease. It is in keeping with this theory of treatment that the Bergeon method has latterly somewhat revolutionized the treatment of tubercular phthisis. Dr. Loomis is convinced that we have in the atmosphere of the pine forest a most valuable antiseptic and corrective agent for cleaning lung cavities, correcting putrefactive changes and arresting the multiplication of bacteria. The views of so high an authority are entitled to eminent consideration. It may be pertinent to inquire whether we may not be able to surround our tubercular patients with a pine forest atmosphere within their own homes? In a measure we believe we can. The various instruments at our command make it possible to atomize antiseptic agents to such an extent as to render them possible of complete inhalation. In this way turpentine, eucalyptol oil and other such antiseptics may be employed to decided advantage. Indeed such substances are now freely employed by the specialist and we would suggest their universal adoption by the general practitioner and by all who undertake to treat phthisis.

THE INFLUENCE OF SALICYLIC ACID ON NORMAL AND ABNORMAL TEMPERATURE.—In a series of experiments conducted by Dr. H. A. Hare, of Philadelphia (*Therapeutic Gazette*, July, 1887), the author observes that salicylic acid does reduce normal bodily temperature although these results are directly opposed to those obtained by Professors

See and Fürbringer. Dr. Hare observed, however, that the drug has but little power over pyretic temperature. He concludes (1) that salicylic acid, when acting on either normal or abnormal temperature, does not seem to have much influence on the circulation either in regard to pulse-rate or arterial pressure. Any change, when it occurs, seems to be an increase of arterial pressure rather than a decrease, and this increase occurred more markedly in the normal than in the pyretic animal. (2) Salicylic acid in reducing normal temperature, probably acts on both functions, namely, production and dissipation, while it seems to act very uncertainly, and irregularly when reducing high temperature, failing frequently, as before stated to prevent an increase of bodily heat.

Miscellany.

Freding After Surgical Operations.—Dr. Jas. B. Hunter, of New York, holds that the surgeon should not consider his responsibilities at an end with the performance of a given operation, but should extend his care and supervision to all the details of the after-treatment, the first and chief of which is the proper nourishment of the patient until convalescence is established. The point emphasized by the author (*Medical Record*) are these:

1. That personal attention should be given, with precise directions, to the nourishment of the patient after all surgical operations, and that too much should not be entrusted to the nurse, who can have no means of knowing the varying requirements of individual cases. 2. That vomiting is to be avoided by every means in our power, even if it requires absolute rest of the stomach for several days. 3. That even appropriate food, where it can be borne, should be given in very small quantities, and at regular intervals. 4. That systematic nourishment by the rectum should be resorted to promptly if other means fail or are insufficient. 5. That less food and more water should be given if the patient suffers from fever. 6. That the dangers caused by vomiting, by flatulence, or by food difficult of digestion, are much more to be dreaded than those due to abstinence from food. 7. That stimulants are of great value, where needed, to meet special indications, but may be generally discontinued as soon as food can be digested. It will be found as a rule, Dr. Hunter states, that after prolonged anæsthesia the stomach is proportionately longer in recovering its tone. It is held that, when the stomach continues to reject food, systematic rectal alimentation should be resorted to after the second day. Dr. Hunter has not much faith in milk in this form of nourishment, but prefers some preparation of beef, such as strong peptonized beef tea, beef peptonoids, and especially in critical cases in which nourishment by the rectum is the chief depeneence, a mixture of pulp made by scraping raw beef with half of its bulk of pancreatic emulsion. This mixture is allowed to stand in water considerably below the boiling point until it liquefies and assumes an homogeneous chocolate-like appearance. Two fluid ounces of this mixture should be administered not more frequently than every four or five hours.—*Med. Age*

Electricity in the Treatment of Tedious Labor and Post-Partum Hemorrhage.—Dr. Fayette reports the following case: The patient was a primipara, twenty-three years of age. Twelve days before labor came on he was engaged to attend her, and on examining her urine he found it contained a large quantity of albumen. When labor commenced the woman's face was œdematous, pulse 110. Head presented in the first position. The os uteri was at first rigid, but gave way after a dose of 30 grains of chloral-hydrate. Uterine contraction was feeble and ineffectual. After working twelve hours, a strong and rapidly interrupted current of electricity was brought to bear on the inert uterus. When the head came down on to the perineum the current was stopped. After delivery, as the uterus did not contract well, a dose of ergot was given. About an hour later the doctor was called hurriedly upstairs and found

his patient flooding. He at once passed his hand into the uterus, but did not succeed in setting up contraction; he then removed the clots and injected vinegar, but still no effectual contraction took place. The injection of hot water was equally in vain. The battery was then requisitioned, and, with the positive electrode in the patient's hand and the doctor holding the negative electrode in his left hand, he grasped the flaccid uterus through the abdominal walls with his right hand; the effect was instantaneous, the uterus at once becoming powerfully contracted, and the hemorrhage ceased. After a few minutes the current was discontinued and the bleeding did not recur.—*Med. Rec.*

The Treatment of Alopecia Areata.—Schachmann has found the treatment of this disease with blisters to be the most efficient, and reports ("Ann. derm. et de syph.") twenty-nine cases treated by him in this way. The duration of his treatment was never more than three months, and generally less than two. In no case were the blisters followed by erysipelas or other complications. His mode of employing blistering was as follows: A blister as large as the denuded area is applied upon the patch and left on until the bullæ form, then removed, and the blister dressed. When the skin is dry, usually on the third day, a new blister is applied, and so on up to three, six, or even ten blisters. The remainder of the head is rubbed morning and night with oil of turpentine 20 parts, ammonia-water 5 parts, and water 100 parts. If there is but one moderate-sized patch or a few small ones, blisters are applied to all simultaneously. But if the patch is very large, or when the whole scalp is affected, the head is divided into districts, and these are attacked successively. The hair is shaved from about the patches.—*N. Y. Med. Jour.*

Doctors Fees.—Miss Wolfe, owner of $10,000,000, who lately died, paid Dr. William Tod Helmuth $5,000 a year to doctor her. Mrs. Alexander T. Stewart retained three doctors at an aggregate cost of at least $40,000, and called in one of them nearly every day. Mrs. Wm. Astor pays to Dr. Fordyce Barker annually an average of $20,000, always sending a check for double or treble the amount of each bill rendered. Her idea is that by rewarding his skill and vigilance liberally she will get the very best service of which he is capable. Mrs. Cornelius Vanderbilt's physician is Dr. W. S. Belden, and although her health is excellent he is consulted often, prevention being preferable to cure, doubtless, and the belief is that the prevention costs not less than $10,000 annually.—*Exchange.*

Naphthol in the Treatment of Enuresis.—Dr. S. J. Wright, of Tallmadge, O., writes to the *Med. Rec.*: "I had a case of enuresis, without cystitis or calculus or any pain, occurring in a neurotic lady thirty-four years old. The condition had existed since childhood. No relief had been found in local or general treatment. She had been obliged to rise many times every night for years. The quantity of urine passed each time was small, the total amount for the twenty-four hours being about three pints. A nervous cough had lasted a year in spite of treatment, and, fearing bacterial infection, I gave her a No. 2 capsule filled with naphthol, also using the drug in the form of a spray. The enuresis rapidly subsided during this treatment, although no change was visible in the appearance of the urine. A temporary cessation of the naphthol for a few days was promptly followed by a return of the enuresis, which again left on resuming the drug. She is now free from enuresis, and can sleep better than ever before. Her throat gives her no pain, her cough is nearly gone, and she can omit naphthol without a return of her enuresis."

Trouble Among Washington Physicians.—The daily papers give publicity to the following: Last spring Dr. Sowers, of Washington, criticised, through the newspapers, the President's manner of living, from a medical point

of view. Surgeon General Hamilton, of the Marine Hospital Service, preferred charges against Dr. Sowers before the Medical Association in Washington for unprofessional conduct. These charges were not sustained by the majority of the committee appointed to investigate Dr. Sowers' case, although a minority report was prepared convicting him of unprofessional conduct. Dr. Sowers has now filed charges with the Association against Dr. Hamilton. He states that Dr. Hamilton has violated two articles of the Association regulations in having shown to ex-Representative Hazelton the charges which he was about to prefer against Dr. Sowers last April. This was done, it is charged, with the full knowledge that Mr. Hazelton and family were patients of Dr. Sowers, and was intended to lower him in the estimation of his patients.—*Med. Rec.*

An Amputation by a Squirrel.—The *San Francisco Examiner* tells a curious story of a pet squirrel that had one of its feet so strangulated, in consequence of its becoming entangled in a strand of thread, that sloughing took place, whereupon the animal gnawed the bones apart at a joint, thus completing the amputation. But in the course of a few days it became evident that there was not enough flap to cover the bone, and then the squirrel pushed aside the soft parts with its nose, and gnawed off the bone at a higher point. The result of this was, that in a fortnight the stump had healed and looked "as perfect as if a surgeon had done the work."—*N. Y. Med. Journal.*

Antipyrin in Bilious Headache.—Dr. John Ogilvy, *British Medical Journal*, July 16th, 1887, says: I have been struck with the want of success that has attended the treatment of a large number of cases of what is popularly termed "bilious headache"—a distressing and recurrent condition from which so many suffer. The predisposing and exciting causes are legion, and are tolerably well recognised both by the victims and their medical attendants. Myself a sufferer, I have taken pains to gather such particulars as I could from others similarly affected; and, while some have found relief from tea, caffeine, guarana, mercurials, podophyllin, the bromides, purgatives, emetics, or hot-water draughts, a considerable proportion have settled down in despairful content to bear their periodical cross with such resignation as they could muster.

My object in writing this is to bring to notice a remedy which in my experience has been wonderfully potent not only in cutting short the attack, but in sensibly lessening the frequency of recurrence. I simply give the prescription (empirically), leaving to others the explanation of its action: ℞ Antipyrin gr. viij. This, either made into a capsule or simply dissolved in a little water, should be taken on the recognition of the attack, the patient lying down in a quiet darkened room, and resigning himself to rest. After an hour another similar dose should be brought to the patient and administered. It may be that a third or fourth is required, but generally sleep or a pleasant langour follows the first or second dose, accompanied by gradual relief from headache. No unpleasant after-effect of any kind is felt, but, on the contrary, the appetite at once returns and the sufferer is well.

I have noticed also that railway traveling, heated rooms, and other usually exciting causes of the headache can be afterwards borne with more impunity than before, and I would suggest a water to be taken by sufferers, before subjecting themselves to such conditions, as a prophylactic.

In this context I have not tried the newer, cheaper, and more potent antifebrin, but experiment might be made in this direction also, and a further step taken to relieve one of the commonest and most worrying of the "slighter ailments" which our advanced civilisation (?) has brought upon us.

The Treatment of Hydrocele.—Dr. Tedenat has followed one hundred and fifty patients, whom he has treated by iodine injection, for from six months to

five years or more; there were eight recurrences in the first four months, and in all twelve per cent. But if, instead of the more attenuated solutions, pure tincture of iodine is introduced, the percentage of the recurrence is reduced to two or three per cent. According to the partisans of incision of the scrotum and excision of the tunica vaginalis, recurrence should never occur; but as a matter of fact it does, sometimes, at least. Bergmann excises the entire tunica vaginalis. The author has performed this operation fifteen times, and all the cases were cured. While he does not know of a death from iodine injections, an accident, which is not rare, consists in losing a drop of the fluid in the scrotum, giving rise to the phlegmon; besides infiltration of iodine into the scrotum there may be suppurating perivaginalitis; however, these accidents are of little gravity. Incision doubtless ought to obviate these accidents if it is aseptic, but asepsis is particularly difficult to insure in this region. The true danger of iodine injection is hemorrhagic perivaginalitis; accordingly, he believes that excision should be performed in case of ancient hydrocele with thick and but slightly transparent walls; in ordinary hydrocele, translucid, with thin walls and without calcification, the treatment of election is iodine injection; a small quantity of tincture of iodine should be injected and allowed to remain in the tunica vaginalis.—*Annals of Surgery*, May, 1887.

Infantile Dyspepsia.—At a recent meeting of the Académie de Médecine, M. Hayem read a paper on the treatment of dyspepsia in infancy, and especially that form of it which is accompained by green-colored diarrhœa. He points out that the green color seen in diarrhœa of infants at the breast is due to a substance produced by a particular bacillus. He maintains that the disease is contagious, and that the germs deposited on the napkins from the stools are contaminating agents. All linen or flannel, therefore, which is soiled either by vomited matter or dejecta should be removed as quickly as possible, and plunged into pails containing a 1 per cent. solution of corrosive sublimate. A teaspoonful of a 2 per cent. solution of lactic acid should be given to the infant a quarter of an hour before putting it to the breast. From five to eight doses are given in twenty-four hours, which represents about 40 to 60 centigrammes of pure lactic acid. — *British Medical Journal.*

The Mechanical Treatment of Skin Diseases.—In the treatment of acne vulgaris, rosacea, sycosis in its chronic form, trichophytosis barbæ with nodular lesions, and lupus erythematosus, Rosenthal ("Vrtljsschr. f. Derm. u. Syph.") recommends multiple scarifications followed by massage. The scarifications should be made in all directions, and with a small, fine, sharp scalpel. He perfers this to any multiple-bladed instrument. After the bleeding following the scarifications has ceased, he strokes the part in a centripetal direction for five or ten minutes, using one or two fingers or a piece of dry lint. Then the part is to be washed and left uncovered. He thinks that he has produced better results with this method than with the parallel incisions commonly employed alone.—*N. Y. Medical Journal.*

Biniodide of Mercury as an Antiseptic.—Dr. L. M. Cheifetz, of Professor Grube's surgical *clinique*, in Kharkov, fully supports (*Vratch*, No. 22, 1887, p. 448) Dr. Bolshesolsky's statements as to the powerful antiseptic properties of biniodide of mercury (see Journal, April 9th, 1887, p. 789). He used the biniodide dressing in sixty cases (including ovariotomy, lithotomy, hernitomy, resection of the kneejoint, removal of the breast, etc.), in all with most satisfactory results. The salt was employed in much less quantity than is necessary in the case of corrosive sublimate. The sole drawback of the biniodide is said to be its price. Among the sixty cases eczema was developed in five, and symptoms of gastric disorder appeared in three during the treatment. — *Brit. Med. Jour.*

Medical Items.

The use of gaseous enemata has been entirely abandoned in the fourth division of Bellevue Hospital, New York, where they were earliest and longest tried. This seems to be the inevitable result of the Bergeon method. It has had its "boom."

A bone setter at Aubervilliers being applied to by a man with a nasal polypus for advice, covered him with blisters from head to foot, and, by dint of promises to cure him extracted 500 francs from his patient. For this a French court has sentenced him to three months' imprisonment, and his wife, who had been assisting him, to fifteen days imprisonment.—*Brit. Med. Jour.*

There are now fifty different hospitals in America devoted exclusively to the treatment of inebriety, with over 1000 patients, besides about 1000 under treatment in private families and other surroundings. Most of these cases have been received after every other method of dealing with them had been tried and had failed, and in most of them the disease had existed for from five to thirty years. The experience of these hospital has been very encouraging.

The recent meeting of the West Virginia State Medical Society held at the White Sulphur Springs was well attended by members and by distinguished visitors from neighboring States. The proceedings were of a highly interesting and instructive character. Dr. Luther S. Brock, of Morgantown, was elected President for the ensuing year. The Society will hold its next annual meeting in Huntington.

The recent meeting of the Mississippi Valley Medical Association, held at Crab Orchard Springs, Ky., has been pronounced by one of our *Exchanges* a most successful affair. The number present was large and "the amount of work done was astonishing." Dr. Dudley S. Reynolds, of Louisville, Ky., the genial editor of *Progress*, was elected President for the ensuing year. The Association will meet in September, 1888, in St. Louis.

A Large Child.—Dr. R. Cyrence McDonald, of Boston, writes to the *Medical Record* that he attended a woman in her first confinement on December 2, 1886. The child, when born, was of ordinary size. On May 1st the infant was measured, with the following results: Head, 17½ inches; shoulder, 20½: waist, 18¾; upper arm, 7¾; forearm, 6; thigh, 10; leg, 7. The length of the child was twenty-six inches and its weight twenty-one pounds. Dr. McDonald reported a similar case not long ago.

The Governor of West Virginia has given offence to the State Board of Health by appointing a physician to a vacant place on the Board who is ineligible and who is bitterly opposed by nearly every physician in Wheeling. The West Virgina State Board of Health did excellent work under the administration of Governor Jackson and it is to be regretted that the present Governor is not interested in the promotion of its efforts in behalf of Public Health. Governor Wilson is charged with indifference to the work of the Board.

The Crown Prince of Germany paid a visit to the Hospital for Diseases of the Throat, Golden Square, on Thursday, July 14th. His Imperial Highness was shown over the wards and the out-patients' rooms, and inspected the special arrangements for treatment with great interest. He made a kindly little speech to the patients, in which he expressed the hope that they would be cured as quickly as he had been. On leaving, the Prince expressed himself much pleased with all that he had seen.—*Brit. Med. Jour.*

The Canada *Medical Record* says that Sir Donald Smith and Sir George Stephen have notified the Mayor of Montreal of their intention to contribute the sum of one million dollars to build, equip, and endow a General Hospital in that city, to be known, in commemoration of Her Majesty's Jubilee, as "The Royal Victoria Hospital." This donation is accompanied by a request that the city should contribute the land on which to erect the building. This has been granted and perpetually leased to the hospital at one dollar a year rental. The charter has since been obtained from the Dominion Legislature and the money has been deposited in the Bank of Montreal.

Acute Pemphigus.—Senator (*Deutsche Med. Wochensch.*, No. 1, 1886) describes a case of acute pemphigus. A healthy girl, aged 16, after being sick for two days with fever, pains in the neck, and presenting an eruption of maculæ of the extremities, trunk, and face, on the third day was the subject of discrete bullæ filled with pus, and of the size of a pea to a hazel-nut, resting on an infiltrated basis. On the fourth day of the disease there were no more bullæ. Cure took place without cicatrix. Senator does not consider a case of this kind to be a primary affection of the skin, but groups it with the acute exanthemata.—*London Med. Rec.*

At a recent meeting of the Paris Biological Society, M. Féré read a note on the treatment of hysterical headache by pressure. Manual pressure in such cases being too tiresome for the operator on account of the length of time required, the author had recourse to a mechanical contrivance. The instrument best suited for the purpose consists of cushions filled with shot, which may be in any shape. In this way a headpiece may be made by which any required pressure can be applied. In four cases treated by the author, satisfactory results were obtained by this plan. When, however, the pain, as is often the case, is in both temples, the difficulties of compression are best overcome by means of a compressor provided with a spring, as constructed by M. Aubry.—*British Medical Journal*, July 16, 1887.

Original Articles.

PRACTICAL NOTES ON THE TREATMENT OF SKIN DISEASES.

Hypertrophies of the Epidermal and Papillary Layers.

BY GEORGE H. ROHÉ, M.D.,

Professor of Hygiene and Clinical Dermatology, in the College of Physicians and Surgeons.

(*Continued from last issue.*)

EPIDERMAL HYPERTROPHY OF OLD AGE.—*Keratosis Senilis.*

In many elderly white persons of both sexes, small patches of thickened epithelium are found variously scattered upon the face, trunk and extremities. These plaques are usually in the shape of roundish or irregular, slightly elevated, brownish or blackish collections. Sometimes they are dry and hard or cornified, but oftener the patch is greasy to the touch, friable, and easily scraped off with the finger nail, leaving a moist and reddened, or slightly bleeding base.

When these epithelial patches are scraped or rubbed off, they rapidly reform, causing the individuals so affected much annoyance, and often uneasiness by their persistence.

Physicians generally regard this as a trifling ailment, and pay no attention to it, but careful observation will show that not rarely the constant epithelial hyperplasia results in an atypical formation, which eventuates in malignant ulceration—true epithelioma.

I have several times observed the gradual transformation of these simple epithelial hyperplasias into malignant new formations.

While this condition of the skin is described by most recent dermatologists, only Hyde and Anderson mention its occasional termination in malignancy. Dr. Hardaway, of St. Louis, has also observed the malignant transformation of keratosis senilis, but I am not aware whether his observations have been placed on record in print.

I am impelled by the results of my experience to call attention to the possible consequences of a neglect of this morbid condition and to urge more careful attention to what is generally regarded as a trivial affection. Prompt and appropriate treatment is not only desirable for its cosmetic effect; it may often save the patient much suffering, and prolong his existence.

The treatment is generally simple. When there is as yet no infiltration, the patches should be softened with some indifferent ointment—cold cream or vaseline, and then washed with soap and water to remove all the epithelial accumulation. Soft soap or *spiritus saponis kalinus* may be needed for this purpose. Afterward an ointment containing sulphur and salicylic acid may be applied nightly with success in most cases. The following makes a good application:

℞:—Acidi salicylici,	gr. x–xxx.
Sulphuris præcip,	ʒ ss.
Pulv. amyii,	ʒ ss.
Ungt aquæ rosæ,	℥i. M. ft. ungt.

Dr. Hardaway informs me that he has had good results from the use of Beiersdorf's salicylated plaster-mull.

If, after six to eight weeks persistent use of this, the epithelial accumulation returns, the patch should be lightly cauterized with caustic potash solution, (1:2) or the thermo-cautery, following this with oxide of zinc ointment for a few days, when the use of the salicylated sulphur ointment is begun again.

If there is any infiltration, no temporising is permissible. The patch must be thoroughly cauterized with the thermo-cautery, caustic potash, arsenious, nitric, or lactic acids. In some cases I have obtained good results from electrolysis.

EPIDERMAL ACCUMULATIONS AT THE MOUTHS OF THE HAIR-FOLLICLES.—*Keratosis Pilaris.*

Individuals with dry harsh skins, who are at the same time too sparing in the use of baths, not rarely have a papular

affection especially localised about the anterior and outer surfaces of the thighs, the knees, etc. This sometimes causes considerable itching, and red inflammatory papules or pustules not rarely appear here and there. On close observation it will be noticed that the papules consist of little epidermal accumulations around the mouths of the hair follicles. The papules are frequently perforated by the hair. At other times the egress of the hair is prevented and it may be seen curled up under the hard epidermal cap.

The free use of hot water and soap will usually suffice in removing the accumulated epidermis, and relieving the subjective symptoms. In other cases, frictions with vaseline, sweet almond oil, cold cream, or a mild salicylic acid ointment may be necessary for a cure.

EPITHELIAL MOLLUSCUM.

Epithelial molluscum, also called contagious molluscum, from its supposed contagious nature, is a rather uncommon disease in this country. It consists of small globular tubercles from a pin head to a pea in size, and generally of a glistening whitish or pinkish color. The summit of each tubercle is somewhat depressed, and a central point marking the opening of a sebaceous follicle can usually be made out. The most frequent seat of the disease is the face, especially the vicinity of the eyelids. It is also sometimes seen upon the genital organs. When irritated the growths may inflame and ulcerate.

The tubercles are firm to the touch. Pressure applied to the sides can usually force the contents, consisting of a whitish semi-fluid mass through the aperture mentioned.

English authorities generally regard the disease as contagious; the evidence in favor of this is, however, insufficient. Inoculation experiments have always failed to transmit the disease. It is more frequent in children than in adults. The disease is a hyperplasia and alteration of the epithelial layer of the skin. Besides epithelial cells, the mass which is contained in the little growths, contains roundish or oval bodies called "molluscum bodies." They are not peculiar to this disease but are also found in other diseases of the epithelial stratum of the skin. These bodies are believed to be the result of a hyaline transformation of rete cells.

The treatment is entirely local. Expression of the contents of the tubercles is sometimes successful. Incision and cauterisation with nitrate of silver may also be practised with success. Kaposi recommends erasion with the curette. The electrolytic method will however succeed best in permanently removing the growths without leaving noticeable scars.

CALLOSITIES.

Callosities occur upon the palms of the hands and the soles of the feet, and in fact any part of the skin exposed to intermittent pressure. They are thickened, cornified patches generally of a greyish or yellowish color, and slightly elevated above the skin. Shoemakers, tailors, and other mechanics in whose occupations a limited part of the surface is exposed to repeated pressure, are liable to callosities. The patch consists of an increase of epidermis, closely packed and cornified.

The treatment consists in maceration of the thickened epidermis, and, if necessary, removal with the knife or solution of caustic potash. The part should be protected to prevent reformation of the thickened epidermis.

CORNS.

Corns occupy a position pathologically between the callosity and the wart. A corn is a circumscribed hyperplasia of epithelial tissue, which projects downward by a conical prolongation into the deeper epidermal layers of the skin. The epithelium is hard and cornified, and pressure upon the broad up-turned base causes exquisite pain, on account of the impingement of the apex of the cone upon the cutaneous nerves. Sometimes the connective tissue layer of the skin becomes atrophied from pressure,

and at others, inflammation and suppuration may occur beneath the corn.

These formations are usually found over the dorsal surfaces of the toes, but not rarely upon the soles of the foot or between the toes. The latter are called "soft corns" and are, if anything, more painful than those on the dorsum or plantar surface. They are generally caused by ill-fitting, though not necessarily "tight" shoes. An increase of humidity in the atmosphere usually intensifies the pain of corns. Hence the common observation that increase of pain in the corns betokens a coming storm. This may be explained partly by the fact, that increasing humidity renders the nerves more sensitive. Ultimately the increased sensitiveness is probably due to the lower pressure of the atmosphere when the humidity is high, permitting an increase of blood-pressure in the skin and thus compressing the nerve terminations.

The diagnosis of corns will never give rise to any difficulty if the parts are inspected. That errors may arise, however, is shown by an interesting case related by Hebra, which may be quoted here on account of its instructiveness. "The patient was a well-developed, stout soap-maker, whose occupation required his standing on his feet all day long. The man was suddenly attacked with severe pains in his feet. Great resolution was required to walk at all, which was only possible by the use of shoes with felt soles. His occupation was in consequence much interfered with. Inasmuch as he also experienced severe darting pains in his feet at night, and was besides well nourished and fond of the pleasures of the table, his physician declared the disease to be gout, ordered appropriate internal medication and baths, but without good result. The patient was then sent to Carlsbad to use the waters. No relief was obtained until hot baths were tried when his condition was somewhat ameliorated. He still had pain on walking, but was easy when the feet were in a horizontal position. His return from Carlsbad was followed by an intensification of his trouble. He was again put upon antiarthritic treatment, consisting of colchicum, acetate of ammonium, etc., and again sent to Carlsbad. No good result following after this second year at Carlsbad I was consulted in the case. In accordance with my general rule, always to examine the affected part, which had been omitted by the patient's medical attendant, I examined the diseased feet and discovered in them the cause of the pains. On the sole of the foot were a large number of corns, from the size of a millet seed to that of a lentil and closely packed together. They were partly convex and partly concave from mutual pressure, which had given rise to the intense pain. The diagnosis of course was made, and afterward confirmed by examination of some of the specimens. The immediate effect of softening remedies, and emollient plasters, soon relieved the patient and permitted him to return to his occupation."*

The preventive treatment of corns consists in the wearing of properly fitting foot-gear.

The discomforts of corns can be to a great extent relieved by protecting them against pressure. For this purpose the perforated corn plasters sold in the drug stores may be used with success.

Soaking the feet in hot water and afterward picking out the little cone of epithelium constituting the corn, will give relief for a time, but so long as the cause continues, the corn will return.

The "soft corns" which are found between the toes generally give most trouble. In these cases a little wad of absorbent cotton placed between the toes will usually relieve the pain.

Salicylic acid collodion painted on the corn every night for three or four nights in succession will generally cause the mass to come out of its bed and make a permanent cure. The preparation or one similar to it, is sold in the drug stores under the names of "Gezou's corn cure," "Russian corn solvent," "Green corn paint" and perhaps other designations. It is an efficient

---

*Hebra and Kaposi, Haut Krankheiten, Bd. II, p. 26

and painless remedy. The formula is as follows:

℞.—Acidi salicylici, ʒss.
Ext. cannabis indicæ, gr. v.
Collodii, ʒii. M.
S:—Put a small camel's hair pencil in the cork.

The evaporation of the ether leaves an impervious, and immovable covering of collodion over the corn, under which the salicylic acid produces its disintegrating effect upon the epidermal accumulation. The extract of Indian hemp is only added for the sake of its fine green color.

A considerable experience with this preparation has given me a high opinion of its usefulness. Care must be taken not to paint it upon the sound skin, otherwise it is liable to cause irritation.

(*To be continued.*)

Selected Articles.

NOTE ON THE CHEMISTRY OF STROPHANTHIN.*

BY THOMAS R. FRASER, M.D., F.R.S.,

Professor of Materia Medica in the University of Edinburgh.

Since my former communications, in which several facts relating to the chemistry of strophanthus hispidus have been stated, I have completed a systematic examination of various parts of this plant, and more particulary of the seeds. Reserving a detailed description of the results of this examination, I propose now to mention only a few of these results in a brief form.

This active principle to which I have given the name "strophanthin," occurs most abundantly in the seeds. By a very simple process, consisting essentially of the separation of oil by means of ether from the alcoholic extract, I obtained some years ago a crystalline body, having great pharmacological activity, and possessing the characteristics of a glucoside. In subsequent experiments, however, although the same process was followed, a well-marked crystalline product was not always obtained, and it soon became evident that this difference was due to some difference in the condition of the seeds which had been operated with. Thus, from seeds collected by the late Bishop Mackenzie about 1868, and also from seeds sent me by Mr. Buchanan, of Blantyre, East Africa, in 1881, I had no difficulty in separating an active principle in the form of well-marked minute crystals; but from seeds obtained from Mr. Buchanan in 1885, and Messrs. Burroughs and Wellcome last year, I failed to obtain an equally definite crystalline body. I also found that the body obtained by the process formerly described, whether in well-defined crystals or not, was resolvable by acetate of lead into at least two bodies, one of which I would suggest the name "kombic acid." It having become apparent, therefore, that the strophanthin first described is not a simple substance, attempts were made to improve the process, so as to separate strophanthin in a more purer form than I had originally succeeded in doing. The result of these attempts has been the adoption of a process whose essential steps are the following:

Starting with the product obtained by the earlier process, it is dissolved in water, tannic acid is added to the solution, the tannate is digested with recently precipitated oxide of lead, and then extracted with rectified and proof spirit. This extract is dissolved in a small quantity of rectified spirit, and the solution is precipitated by ether. The precipitate is finally dissolved in weak alcohol, and through this solution carbonic acid is passed for several hours, by which means lead is completely got rid of. After filtration, the solution is evaporated at a low temperature, and the product is dried *in vacuo* over sulphuric acid. In the process of drying it first assumes a translucent, gummy appearance, and then becomes opaque and white.

Strophanthin thus obtained is imperfectly crystallised, neutral or very faintly acid in reaction, intensely bitter, freely soluble in water, less so in rectified spirit, and practically insoluble in ether

*From *British Medical Journal*, July 16th, 1887.

and chloroform. It burns without residue, and it does not contain nitrogen. When subjected to ultimate analysis, its percentage composition, taking, for the sake of brevity, the average of several closely agreeing combustions, was found to be: Carbon, 55.976; hydrogen, 7.754; oxygen, 36.283. This percentage composition faily corresponds with the formula, C_{20}, H_{34}, O_{10}.

The effect of a large number of reagents upon it have been determined. In the meantime, the following may be stated. Strong sulphuric acid produces a bright green color, which soon becomes greenish-yellow and brown; sulphuric acid and bichromate of potash, in addition to the changes produced by sulphuric acid, a blue color; phosphomolybdic acid, after contact for a few hours, a bluish-green, which, on the addition of a few drops of water becomes pure blue; nitric or hydrochloric acid, a pale yellow-brown; and caustic potash, ammonia, and other alkalies a faint yellow. With a 1 per cent. solution in water, phosphomolybdic acid causes somewhat slowly, a bright green color, which after prolonged contact becomes greenish-blue; nitrate of silver, a reddish-brown color and a slight dark pretipitate; caustic potash and other alkalies, a very faint yellow; dilute sulphuric acid a faint white opalescence; and tannic acid, an abundant white precipitate, soluble in excess both of strophanthin and of tannic acid. The solution, tested at the ordinary temperature, is not changed in appearance by acetate or subacetate of lead, perchloride of platinum, chloride of gold, perchloride of iron, perchloride of iron and sulphuric acid, perchloride of mercury, sulphate of copper, bichromate of potassium, iodide of potassium, nor by many other reagents; except that nearly all acid reagents cause the solution to become slightly hazy, and it is then found that the solution contains glucose. This decomposition is also produced by sulphuretted hydrogen, more distinctly and rapidly after gentle heating, and for this reason it is not advisable to use sulphuretted hydrogen in any process for preparing strophanthin.

Indeed, all the mineral acids, excepting carbonic acid, and many of the organic acids, resolve strophanthin, even in the cold, into glucose and a substance which I have named "strophanthidin." A very pretty crystallisation of the latter may be obtained in a few hours when strophanthin is dissolved in a 1.5 per cent. solution of sulphuric acid. Contact at the ordinary temperature for even three days with dilute sulphuric acid does not apparently entirely decompose the strophanthin, as an additional quantity of glucose seems to be afterwards produced when the solution filtered from strophanthin is heated at 212° F. for a few hours. Thus, when strophanthin was decomposed at the ordinary temperature by contact for about three days with 1.5 per per cent. sulphuric acid, there was obtained 37.5 per cent. of crystalline strophanthidin, and, by estimation with Fehling's solution, about 20 per cent. of glucose.* The crystals of strophanthidin having been removed by filtration, and the almost colorless, bitter and acid fluid having been boiled for four hours, it was now found that the glucose had increased to 26.64 per cent., and that about 4.3 per cent. of a amorphous, brownish substance had been formed.

This action of acids renders it apparent that an acid, and especially a mineral acid, should not be used in the preparation of strophanthin. Thus, in 1877, seven years after the publication of my first communications on this subject, Hardy and Gallois described a process in which by using for the extraction of the seeds rectified spirit acidulated with hydrochloric acid, they obtained a crystalline product which they believed to be strophanthin. There can be little doubt, however, that their crystalline product was partially if not entirely, strophanthidin, not only because the process they employed would decompose the strophanthin into strophanthidin and glucose, but also because

*In the solution obtained by this decomposition the exact estimation of glucose by means of Fehling's solution is rendered difficult and uncertain by a green hue being produced and persisting after the blue color of Fehling's solution has disappeared.

their crystalline product was found by them not to yield glucose when it was heated with dilute sulphuric acid. Hence they concluded that strophanthin is not a glucoside (*Comptes Rendus*, lxxxiv, 1877, p. 261; and *Journal de Pharm. et de Chim.*, xxv, 1877, p. 177). The glucosidal character of strophanthin has now been amply demonstrated by a large number of experiments which I have made, and the experiments of subsequent observers, and especially by those of Mr. A. W. Gerrard, described in an interesting paper published this year (the *Pharmaceutical Journal and Transactions*, May 14th, 1887, p. 923). Further the solution obtained when strophanthin is decomposed at 212° F. by dilute sulphuric acid has been fermented with yeast, and carbonic acid, representing 23.64 per cent. of the strophanthin, has been obtained.

A FEW PRACTICAL OBSERVATIONS UPON THE TREATMENT OF THE LATE NEOPLASMS OF SYPHILIS.*

BY ALGERNON S. GARNETT, A.M., M.D., OF HOT SPRINGS, ARK.

There is no subject which has occasioned me more thought than the late neoplasms of syphilis, nor any which have shown a greater want of prescience in the treatment instituted for their relief. Their origin is often coincident with the second stage of syphilis, and under a temporizing treatment they have been evolutionized, until functional activity and organic integrity have been destroyed under their erosive power—the different types of paralysis being their product. With rare opportunities for seeing examples of the treatment pursued by the different medical men of this country, I am forced to the conviction that, with a few notable exceptions, the whole theory of the treatment of syphilis, particularly in its later stages, is somewhat erroneous; that remedial agents are not used to their higher potentialities, deference to authority halting the surgeon before he has made more than a fleeting impression upon the condition sought to be relieved, the fear of the remedies which he uses constituting one of the chief obstacles to successful treatment. The hypothetical procrustean bed in which every patient must be laid, with his allotted dose, is unscientific and absurd. Text-books for the guidance of the inexperienced should do away with *fixed maximum* doses, in chronic diseases, where opportunity for experimental tests are given, and the educated tolerance of remedies may become the measure of the quantity required. This tolerance may be reached without endangering life by careful supervision. As illustrative of this statement, I have had the most brilliant results from the use of from six hundred to a thousand grains of potassium iodide daily, when an initial dose of five or ten grains, three times in twenty-four hours, was borne with the greatest discomfort. When the large dose is once attained, the irritation of the mucous membranes is much less than is often witnessed in the use of the smaller quantity. Affections of the kidneys, which have been frequently ascribed to the large doses of iodides, have, so far as my observation goes, been due to the specific trouble, and coincident with other pathognomonic symptoms of that disease. I believe in removing neoplasms, whether slight or grave, and I consider no patient safe so long as there is the slightest evidence of disease present. I believe in stamping the disease out, and keeping it subjected, knowing how easily destructive processes develop grave proportions. As between too much medicine and treatment on the one hand, and syphilitic manifestations on the other, I choose the former always: few patients are overtreated, while thousands suffer from not having received treatment enough. The iodides and mercury should be pushed in the treatment of every stage of syphilis, and in as large doses as can be borne. If the cachexia of the later stages prevents the free use of mercury, tolerance of the drug must

*From *Journal of Cutaneous and Genito-Urinary Diseases*, August, 1887.

be cultivated until the patient can be put under the full influence—this being the only plan of safety. My own experience is so opposed to the partial relinquishment of mercury in the later stages of syphilis that I can hardly understand how many learned surgeons who have discussed this subject could have fallen into the grave error of confining their treatment chiefly to the iodides. Their perpetual use only, in large doses, would give protection. I do not believe that syphilis is a benign disease, nor that, in many cases, its tendency is to self-limitation. I question the statistics, in many instances, and doubt whether the supervision of the cases has been accurate which would point to such a result. The benignancy of to-day is formulated in the paralysis of to-morrow. The seeming health of a few years is brought to a final catastrophe by the horrors of dementia. In a case-book containing some ten thousand cases or more of syphilis, I might quote numbers which would prove interesting, but shall confine myself to one or two only:

E. D., æt. 32, a young man of healthy parentage, had contracted syphilis four years previous to the paralysis which brought him to me. After some unusual exposure on the Western plains, he was stricken with paralysis, causing complete loss of power in the muscles of locomotion, as well as in the sphincters of the bladder and rectum. This condition had lasted for nearly a year when he came under my observation and care. To complicate the difficulty and render the case still more unpromising, he had a bad stomach which performed the processes of digestion very imperfectly. With watchful care, after three years of treatment, the patient was restored absolutely to all of his functions, and is now well and healthy, and in the active pursuit of business. This result was achieved by the administration of, in the aggregate, about two hundred thousand grains of the potassium iodide and the inunction of sixty ounces of mercury. Had I temporized with the treatment, by giving insufficient doses, I should have expected structural lesions of the cord to have ensued.

I. B., æt. 44, a miner, from Arizona, presented himself for treatment while affected with aphasia and mental imbecility, the result of syphilis contracted ten years previously. This case was treated for four years with large doses of the iodides (as much as eight hundred grains a day being given for a part of the time) and mercurial inunctions. This treatment was pursued interruptedly, the patient resting from all drugs for two months at a time. The result was extremely gratifying, as all of the symptoms were relieved and the patient restored to health and vigor. These patients were treated under the benign influence of the thermal baths of Hot Springs, for which I claim decided merit in the face of an adverse opinion entertained by some of my scientific friends. The action of these waters is reconstructive, stimulating and tonic, bringing into renewed activity energies that had long lain dormant. Chemical analysis shows that this water is undergoing constant changes, while losing its heat, by liberating gases and precipitating solids from the solutions in which they have been held, and, as from every chemical action electricitiy is evolved, this might account for the highly stimulating effects of these waters in contrast to water artificially heated. Practical results are the crucial tests by which we judge of the value of all remedies, all hygienic methods and treatments, and those agents are stamped as curative which achieve beneficent ends, however much in the dark we may be as to the how and why.

Abstracts and Extracts.

Obstruction of the Bowels Relieved by Gaseous Enemata.—Dr. W. P. Copeland, of Eufaula, Ala., reports the following case in the *Med. Rec.*: "A man, aged about forty, sent for one of my confrères because of a severe pain in the region of the ileo-cæcal valve. On an examination, a tumor the size of a large orange was outlined in the right

inguinal region, which was very sensitive and painful on manipulation. The pain was so severe that the attending physician found it necessary to give morphine hypodermatically; he also gave calomel and, later on in the day, a large dose of castor-oil, followed by enemas of water. During the early part of the succeeding night, as the patient failed to obtain relief, the pain becoming so severe as to be unendurable, I was called in, and administered another hypodermic administration of morphine, and resorted to enemas of various substances without obtaining any reduction of the tumor or movement of the bowels. On the following day, the second one of his sickness, the case looked so hopeless that we thought best to notify the family of the patient's critical condition. They telegraphed to one of the most experienced and skilful physicians in another city, for his earliest possible attendance in consultation. Late in the afternoon it occurred to me to use an enema of carbon dioxide, and having the apparatus for generating and administering the gas near at hand, I proceeded to do so. When about one-third of the contents of the gas bag had been injected, the patient expressed a desire to go to stool, which he did, with the result of passing about half a teacupful of fæcal matter. The enema was repeated, this time being followed by a considerable passage, after which the patient had other actions without further administration, and has since been able to move his bowels as usual. Whatever doubts may occupy the medical mind as to the beneficial results of gaseous enemas, recommended by Dr. Bergeon, there is none as to its efficacy in the above case. Of course, the precautions as laid down in regard to overdistention should be carefully observed, as I have no doubt much harm might accrue from a careless use of the method."

Method of Treatment of Prostatitis, with Especial Reference to Hypertrophy of the Prostate.—Among the different forms of prostatitis, Dr. Fischer of Munich (*Centalblatt für Chirurgie*, No. 3, 1887) distinguishes that of youth, in which the genitals are overused (*i. e.*, misused) from that of older individuals. The first appears as an acute affection, and at times violent in its onset, with high fever, rigors, and even sopor, until the abscess in the urethra bursts, either spontaneously or from attempts at catherization. Its cyclical course lasts about eight days, and repeats itself after a time. Often for many years one attack follows another in the same way, and finally ends in a cure. Occasionally, however, it passes into a chronic inflammation, with hypertrophy. The more chronic form in older people begins usually with catarrh of the gland, prostatorrhœa, and leads slowly to hypertrophy. According to Nussbaum, it is very characteristic of the affection that when the catheter cannot be used, the bladder may only be emptied when the body is placed in a peculiar position, and indeed the position of the body which renders this possible, does not remain the same, but must be changed from time to time to effect the same result. We pass over here the well-known resulting conditions, and point out only the not infrequent occurrene of abscesses. During the treatment of prostatitis in its acute stage, after the regular course of treatment and along with the ordinary after-treatment with iodine and bromine mineral waters, Nussbaum has used the cold ascending douche with great success; a treatment which, in chronic prostatitis and hypertropny of the prostate, even in cases of long standing, is followed by the best results. Occasionally, among the better class of patients, this treatment may be advantageously combined with brine and sea baths either as full or sitz baths. He disapproves of all methods of treatment which have for their object the forcible dilatation of the narrowed portion of the urethra or the destruction of the gland, as well as all operations for extirpating the prostate through the rectum. Bottini's galvano-caustic treatment is on the other hand, approved by Nussbaum, although the difficulties of the operation do not favor its employment. Notwith-

standing the untoward results of parenchymatous iodine injections, Iverson's sub-cutaneous injections of ergotine are thought to deserve careful attention. It is not advised to make an opening of a prostatic abscess from the urethra because of the danger of making a false passage in catherizing. The incision through the rectum or the perinæum deserves also the preference over puncture with a trocar. Maas's recommendation to divide the sphincter ani in severe cases is worthy of attention because of the opportunity thus given of applying antiseptic washes.

When there is retention of urine in consequence of hypertrophy of the prostate and the various methods of catheterization have been tried without success the author recommends, according to Nussbaum's method, the puncture above the symphysis pubis, with the subsequent introduction of a Nélaton's catheter, and with antiseptic washing out in preference to the puncture for aspiration, in which latter washing out is not possible—a very important procedure, and one which ought frequently to be done. According to the author's observations, he has often succeeded, directly after the first operation, in introducing the catheter through the urethra; when, after the cure of the cystitis and the removal of the resulting inflammatory products, the prostate rapidly decreases in size,and the fistulæ are also soon cured.—*Journal Cut. and Genito-Urinary Diseases.*

Some of the Rare Symptoms Produced by Gall Stones.—Ord (*British Medical Journal*) took this subject as the basis of a paper read at the last annual meeting of the British Medical Association. He first drew attention to the circumstance that gall stones might exist without producing symptoms, as was evident from the number frequently found post mortem in cases in which their presence had not been suspected during life.

Gall stones may be passed without symptoms. Two or three illustrative cases of the kind were briefly related. One was a woman who had had no previous signs of gall stones, and who, the day after her confinement, passed a gall stone of such an enormous size that its passage was attended with almost as great difficulty as a second labor, and it was hence dubbed "the twin." Gall stones may give rise to pain, vomiting, etc., without causing jaundice. A patient was subject to irregularly recurring attacks of pain in the region of the gall-bladder with associated vomiting and faintness. She had never had jaundice nor passed pale stools. She was seen by many physicians, and various diagnoses were made excepting the correct one. The patient died in an attack a few months later, and was found to have had a large biliary calculus, which had made its way through a perforation in the gall-bladder into the peritonæum. Gall stones may produce intermitting pyrexia. Both Murchison and Charcot have drawn attention to this, the former attributing it to a nervous irritation, the latter to a uro-septic fever. Ord's attention was first called to this complication by some remarks by the late Dr. Murchison having reference to the case of a distinguished Indian medical officer, who, after his return to England, was attacked with paroxysms of shivering, followed by fever and sweating, at regular weekly periods. He was supposed, at first, to have a recurrence of an old intermittent, and, later on, to have hepatic abscess, till at last his symptoms indicated, and the necropsy proved, that his actual and only disease was a gall stone so impacted as to produce great irritation, but not complete obstruction, of the common bile duct. A case of glycosuria came under the author's observation which was due to a gall stone, and which disappeared, as well as the concomitant symptoms of emaciation, thirst, etc., on the passage of the gall stone. In another case an attack of pneumonia developed in the subject of biliary calculus, and to the author it appeared to be in some way dependent upon it. The co-existence of gall stone with malignant disease of the gall-bladder and parts immediately adjoining has been recorded frequently

enough to give rise to the speculation as to how far the presence of gall stones would be capable of causing malignant disease. The author has met with a few cases in which the evidence was of an affirmative nature. He has seen two cases in which the passage of gall stones was attended with sharp hæmorrhage. In one the hæmorrhage preceded the passage of a large gall stone without biliary obstruction. The bleeding might have been due to the tearing of the opening between the gall duct and bowel. In the second case considerable hæmorrhage occurred directly after an attack of biliary colic with jaundice. After the cessation of the hæmorrhage, a ragged gall stone of such size as might have allowed it to traverse the gall-duct was found in the fæces.—*N. Y. Medical Journal.*

The Wholesomeness of Swill-Milk. —Dr. Geo. H. Rohé, of this city, writes as follows in *Science* of July 22d:

The discussion carried on in the pages of *Science* for some weeks past upon the healthfulness of milk from cows fed upon distillery-swill has, in my opinion, failed to definitely settle the question. There can be no doubt of the vital importance of the matter, and all physicians and sanitarians will agree that a solution of the problem is highly desirable.

1. I venture to say that no positive evidence has been submitted showing any ill effect of swill upon cows fed with it. The evils attributable to it are largely, if not entirely, to be ascribed to the unsanitary surroundings of the animals.

2. Whatever evidence has any positive value indicates that swill is equally as good and proper food (used with judgement) as hay, dried fodder, ensilage, or bulbous roots. These all differ widely in chemical composition from the green foods (grass, clover, green oats, and corn), which may be looked upon as the normal food of cows.

3. It may be worth while remembering that lactation in a dairy is not a normal process. Dairy-cows are "milk-machines." The dairy business would not be very profitable if lactation were not forced to some degree.

4. Experienced agriculturists, like Professor Armsby and Dr. Sturtevant (*Science*, ix. pp. 602-3), have failed to see any ill effects attributable entirely to swill, and such veterinarians of ability as Professor Law and Dr. Salmon (*Ibid.* p. 552) corroborate this testimony.

5. The facts collated by Professor Brewer (*Ibid.* p. 550), showing the ready absorption of germs and odors by milk, the transmission of the flavor of various odoriferous substances eaten by the animal subsequent to the secretion the passage of certain drugs administered medicinally into the milk of nursing women, or the notorious fact that swill-milk stables are "proverbially foul and stinking," have no bearing upon the case. The evidence required to establish the unwholesomeness of swill as food for milk-giving animals must be of a different character.

6. While it may be conceded that "chemical analyses will not settle the question" of the wholesomeness of swill-milk, the fact remains that we have at present no other way of determining the physical qualities of a specimen of milk. Bacteriological investigations may determine the presence of the germs of tuberculosis, typhoid, and, in view of recent discoveries, of scarlet-fever, but will not enable us to ascertain the relative proportions of the saccharine, fatty, aqueous, or proteid matters present. Chemistry is here still our main-stay, and, other things being equal (more definitely, disease-germs being absent), a specimen of milk nearly approaching the chemical standard established by Kœnig may be looked upon as a wholesme food. Other factors besides the food of the animal enter into the production of milk. The age of the animal, period of lactation, time when the milk is drawn, and general sanitary condition, must not be ignored.

7. The asserted greater firmness, and consequent indigestibility, of the coagulum in swill-milk is not based upon a sufficient number of observations to admit of unquestioned acceptance. It should be easy to determine this in any chemical laboratory. No single series

of observations would decide this, however. It would be necessary to test milk from cows fed upon swill but kept under good sanitary conditions, side by side with milk from animals kept under the ordinary conditions of city stable-life, and fed upon various foods.

8. A scientific solution of the question will not be furthered by prejudiced appeals or unreasoning denunciation. Patient investigation, keeping in view all circumstances of the question, and avoiding all one-sidedness in considering the matter, will alone bring about the object desired. Personally I at present occupy the same stand-point as Professor Armsby (*Science*, x., p. 4), "Much of the common prejudice against the use of distillery-slops appears to be occasioned by their irrational application, and frequently by the filthy surroundings of the animals, rather than by anything injurious in the feeding-stuff iself."

Separation of the Plancenta.—Dr. Berry Hart is of the opinion that the true method of separation of the placenta has not hitherto been discovered, and proposes an explanation different from any yet offered. He says that it has been proven by Balfour that diminuion of the placental site by contraction of the uterus does not cause the separation of the placenta. It cannot be due exclusively to the formation of blood clot behind the placenta, for often the placenta comes away without any blood at all. He finds, however, whenever the placental site is caused to expand the placenta at once becomes detached. Thus in placenta prævia, which he defines to be the attachment of the placenta or any part of it to the lower uterine segment, as soon as this lower uterine segment begins to expand the attached placenta begins to separate with consequent bleeding.

Dr. Hart infers from this that the uterus follows the expulsion of the child with the extreme contraction, then immediately begins to expand, and along with it the placental site,which in a brief time results in the detachment of the placenta.—*American Practitioner and News.*

Dry Hot-air Baths for Syphilitic Patients.—Dr. Stepanoff, of Moscow, has contrived a plan of treating patients suffering from syphilis which has resisted mercurial and iodine treatment. He has had a box or bath constructed, with an iron bottom lined with thick felt, in which the patient is placed. The bath is heated to about 170° to 190°F. by means of two Bunsen's lamps, each consisting of five burners. After the patient has been "baked," he is put to bed and covered with blankets, so as to prolong the sweating process commenced in the bath for an extra half-hour. After this he is allowed to dress and go into the ward to his dinner. By means of these baths the mercury is rapidly eliminated from his system, and the patient's condition greatly improves, and, after a course, mercury is found to act quickly and energetically—*Lon. Lan.*

A Vienna Ordinance Concerning Homœopathic Preparations. — The "Union médicle" states that a recent ministerial decree restricts the right to dispense homœopathic preparations to those homœopathic practitioners who really observe the method of dilutions laid down by the homœopathic school. The object of the ordinance is to put a stop to the abuse by which, under the guise of the homœopathic preparations, all sorts of remedies have been given to patients by certain physicians.—*N. Y. Medical Journal.*

Long-continued Lactation on the Uterus and Ovaries.—Dr. Sinclair in the *Revue Med.*—The conclusions are: 1. Lactation tends to prevent conception by its influence on the ovaries in retarding a return to a state of perfect ovulation. 2. After weaning the evolution of the ovaries becomes more rapid than during lactation. 3. After prolonged lactation a sudden cessation may be followed by a rapid evolution of the uterus and ovaries, giving rise to symptoms of hyperæmia of the ovaries and uterus. 4. Prolonged lactation may produce a superinvolution of the uterus and ovaries, causing, where circumstances favor, a partial or complete prolapse of the womb. —*Arch. of Gynœcology.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, AUGUST 13, 1887.

Editorial.

ELECTRICITY IN THE TREATMENT OF FIBROID TUMORS OF THE UTERUS.—There is scarcely a disease with which woman is afflicted more distressing in many of its features or more hopeless in its near results than uterine fibroid. Whilst only, comparatively speaking, a common affection among the white races it occurs with such frequency among women of African descent that it constitutes one of the most distressing ailments which afflict this race.

It has been said upon good authority that nearly every other negro woman has a uterine fibroid tumor of some character. We believe this to be an exaggerated statement, but it cannot be denied that a very large percentage of negro women are thus affected.

Admitting the frequency of these uterine growths, their treatment has been highly unsatisfactory. Attempts have been made to remove them by hysterectomy with such fatal results as to discourage this method of operative interference, except in the most extreme cases. Normal ovariotomy has been called into existence with the view of limiting the growth of these tumors and of arresting one of their most alarming symptoms, hæmorrhage. The justifiability of this operation, it may be said, is still under discussion and there are good authorities who question the value of the procedure when applied to all cases. The method of treatment by ergot administered by mouth and by injection has had its advocates. So far attempts at the removal of these tumors or at limiting their growth have not been as satisfactory as is to be desired, hence it is not to be wondered at that the surgical mind has called to its aid another agent which is likely to supplant, for the time being at least, all other methods of surgical treatment of solid tumors.

The treatment of fibroid tumors of the uterus by electricity is not a new one. From time to time numerous attempts have been made to disentegrate these solid growths with currents of electricity, but the difficulties in the way of the successful utilization of this force were found innumerable, and brought such discouragement that the various attempts at its employment were well-nigh abandoned. But little progress was made with this agent in the treatment of solid tumors until Apostoli, of France, led the way to a new field of work by his experiments and labors. The revival, or rather successful inauguration, of the electric treatment of fibroid tumors begins with Apostoli. With patient and unflagging zeal this distinguished Frenchman has taught the surgical world that solid tumors are not to be removed by a sudden and complete disintegration of the growth by electricity, but that success must follow frequent applications of the agent and a gradual shrinkage of the tumor mass. Apostoli's work, even to the present date, has assumed the nature of one continued experiment. Whilst he has been rewarded with unmistakable evidences of success, he yet affirms that more time and observations are needed before coming to complete and decisive conclusions.

Dr. Apostoli has worked upon these tumors from two different directions, according to the character of the uterine growth and the nature of its symptoms. In those cases of solid tumors the whole extent of the mucous surface of the uterine cavity must be acted on by the negative pole, or should the uterine cavity be inaccessible a puncture must be made into the walls of the growth

and the galvano-caustic action be applied directly to the tumor mass. This procedure acts in a solvent way upon the tissues of the tumor and brings about their rapid elimination, but not total destruction. The process is virtually a uterine cauterization in which the highest possible degree of electro-chemical action is used. In those cases where uterine hæmorrhage is the alarming symptom to be combatted, Dr. Apostoli proceeds in a different manner. The positive pole is here brought into action, since it possesses coagulating and hardening properties. The pole is applied to the interior of the uterus so that its coagulating effect may transform the hæmorrhagic area of the mucous membrane of the uterus into a surface that will not allow of sanguineous exudation and excessive secretion. The action of the current likewise causes contraction of the tumor mass, a lessening of the blood supply, and a consequent partial atrophy of the growth. The practical application of the two poles of the battery to the treatment of these different forms of fibroids has been worked out with great care by Dr. Apostoli, and it is through attention given to details that good results must be expected from their use in the two different rôles assumed by them. Dr. Apostoli begins by measuring the strength of the electric current and then proceeds by increasing the galvano-caustic force until the highest possible degree of electro-chemical action is employed. At the first sitting he employs a current ranging from 20 to 100 milliampères and later on, as the treatment progresses, the current is augmented to 150, or even to 250 milliampères. It is due to the safe utilization of these high currents that practical results have followed the Apostoli method. To provide against shock, Dr. Apostoli employs the following safeguards:

The plantinum sound or needle used in the uterine cavity or in the tumor mass is so guarded that the bare metal is only brought into contact with the surface to be acted upon, and nothing else. This is an important step in the management of the current. Next the surface of the cutaneous pole, which is placed over the lower part of the abdomen, is embedded in a layer of wet potter's-clay about a half inch thick. By this method the skin is not burnt and no great pain results.

With careful attention to details the electric current is applied without shock and without pain. The sittings are had from once to twice a week and the current is passed through the tumor from eight to ten minutes at each sitting. The number of applications varies from three to four to over thirty. Dr. Apostoli has reported a number of cases in which the results were of the most satisfactory nature.

There can be little doubt of the fact that the method of Apostoli has awakened an interest in a most valuable therapeutic agent and we think the time is not far distant when electricity will be called into requisition in the treatment of a much larger class of pathological conditions. We by no means regard it a panacea for all forms of uterine disease, nor even a specific for uterine fibroids.

It is an agent which may be employed in the most empirical manner and with positive detriment, hence there is need for words of caution and conservatism before we jump to rapid conclusions in regard to the great benefits which some observers claim for it. It will be found, we think, to have a most useful purpose, but one capable of great abuse and of dangerous charlatanism.

A Move in the Right Direction.—The announcement recently made by the College of Physicians and Surgeons of New York to the effect that, beginning with the session of 1888–9, and thereafter, it will require preliminary examination of matriculants who do not hold diplomas or certificates from recognized colleges or schools of science, should be hailed with satisfaction by the profession.

If anything is needed at the present time it is a reform in our present system of medical education. Under the exercise of old custom students of any and every grade of preliminary training have been

freely admitted to courses of medical instruction by nearly every medical school in this country. With absolutely no safeguards thrown around the study of medicine, it is not a matter of surprise that the ranks of the profession of medicine are filled with ignorant, illiterate and incompetent men. The extent of this ignorance and illiteracy can only be appreciated by those who have the means of coming into contact with large numbers of medical practitioners. To the medical editor these revelations of incompetency are frequent and appalling. We are frequently in receipt of communications from medical practitioners which display such illiteracy and ignorance that we cannot but regret that their prior medical training was so utterly deficient as to defeat their usefulness in professional work to a very great extent. Whilst we admit that an occasional man may make an excellent practitioner with a very small knowledge of the language he speaks, this argument will only hold good in such exceptional cases as make it a dangerous precedent. Other things being equal the better preliminary education the medical student has the better is he equipped for the study and practice of his profession. He should at least have a good knowledge of his own language and some acquaintance with Latin and Greek, but especially the former. He should know something of elementary mathematics, including arithmetic, algebra and plain geometry, and should have some acquantance with general history and modern literature. Those young men who have not enjoyed the advantages of preliminary instruction to the extent here indicated should be discouraged by their preceptors from studying medicine and should be refused admission to our medical schools until they have passed a satisfactory examination on these banches.

The action of the College of physicians and Surgeons of New York in requiring a preliminary examination is a move in the right direction and we trust that their example will be the means of inducing other schools to adopt this course.

Reviews, Books and Pamphlets.

The Science and Art of Obstetrics. By Theophilus Parvin, M.D., LL.D., Professor of Obstetrics and Diseases of Women and Children in Jefferson Medical College, Philadelphia, etc. Illustrated. Philadelphia: Lea Brothers & Co., 1886. 8 vo. pp. 672.

The author of this work enjoys an international reputation as a teacher, writer and practitioner.

The announcement made several years ago that he would give to the profession a text-book on obstetrics was well received. The work promised has made its appearance in style, quality and character in full keeping with what was expected at the hands of such an experienced authority on obstetrics. Dr. Parvin has written a thoroughly creditable book. He has arranged the test in a practical, concise and systematic manner and has presented his subject-matter in good English. His descriptions are clear and accurate and his style is easy, graceful and lucid. The author deviates very little from the usual form of the standard of text-book treatises on obstetrics. He begins Part I with the anatomy of the female pelvic organs and then passes to the consideration of the physiology of these organs during non-gestation. Part II opens with the subject of conception and next treats under various heads the entire subject of pregnancy, including the pathology of this condition. Part III is devoted to a consideration of the subject of "Labor," both normal and difficult. Part IV treats of "The Puerperal State" and Part V is taken up with a consideration of "Obstetric Operations." This practical arrangement of subjects under different departments makes the comprehension of the scope of the work very intelligible. The various subjects thus treated likewise command our commendation. Dr. Parvin has made his statements exceedingly clear, and in many places his treatment of the subject-matter is both skilful and interesting. He presents a great mass of obstetric knowledge in about as narrow a compass as it is possible to condense it without

sacrificing clearness and important details. It is but fair to say that Dr. Parvin has written this work from the standpoint of a teacher rather than of the practical observer; that is to say, he has given us a work which embodies the views of other workers in this field rather than the results of his own ripe experience and large observation as a practitioner. This fact may disappoint a few who wish to know more of the author's views, but it has its useful side and this Dr. Parvin has turned to good advantage. His aim has been to give the profession a work free from cant and egotism, a practical, clear and systematic presentation of obstetric knowledge in its most rational and modern aspects. In this task he has well succeeded. His work is strictly American in its characteristics and it is a valuable contribution to our literature from this standpoint.

System of Gynæcology. By American Authors. Edited by MATTHEW D. MANN, A.M., M.D., Professor of Obstetrics and Gynæcology in the Medical Department of the University of Buffalo, N. Y. Illustrated. Volume I. Philadelphia: Lea Brothers & Co., 1887, pp. 769.

The tendency of modern times is leading in the direction of the division of labor. This is true not only of all branches of industrial trade where men find strength and perfection by a division of work and combination of effort, but it applies to all departments of learning and science. Book Publishers have recognized this fact and have taken advantage of it in various directions. The Systems of Practice of Medicine and Practice of Surgery were published in deference to this broad principle, that the work divided among a number of different laborers, each specially skilled in his department, would secure results not possible under the labor of one mind. The practical result of this idea has again given to the profession a series of new works under the title, "A System of Gynæcology." Volume I of this series has just been issued by the Publishers and is now before us. This volume opens with a "Historical Sketch of American Gynæcology," by E. W. Jenks, M.D., LL.D. "The Development of the Female Genitals" is the next subject very thoroughly and comprehensively presented by Dr. Garrigues, of New York, and "Malformations of the Female Genitals" are likewise treated fully and clearly by the same author. "The Anatomy of the Female Pelvic Organs" is described at great length and in a most admirable manner by Dr. Henry C. Coe, of New York. The subject of "Electricity in Gynæcology" has been written by Dr. A. D. Rockwell, of New York. Dr. Rockwell's practical acquaintance with electricity has enabled him to state the important uses it can be made to perform in Gynæcology. In view of the great prominence which now attaches to the clinical uses of electricity in gynæcology this chapter should be carefully read. Our space will not permit a description of the many other practical subjects treated in this volume. We can only mention a few which seem worthy of notice here. "The General Consideration of Gynæcological Surgery" by E. C. Dudley, of Chicago, "General Therapeutics" by A. J. C. Skene, of Brooklyn, and "Menstruation and Its Disorders" by Dr. W. Gill Wylie can be read with a decided profit. Upon the whole the articles contributed to this volume are practical and valuable additions to our knowledge of Gynæcological subjects. A few of these deserve to rank among the best productions from the pens of American writers upon any subject.

The volume as published is the style for which the Leas are famous. It is fully illustrated with colored plates and wood engravings. We commend the work to all of our readers interested in this branch of science.

The Century. The Century Company, Union Square, N. Y.

The Century for July has accommodated itself somewhat to the desire of its readers during the hot weather, and contains matter of a lighter and particularly out-of-doors character. Mr. John Burroughs tells about Wild

Flowers and shows the pictures of them beautifully done by Helena de Kay, Gilder and Harry Fenn.

W. J. Henderson writes of the "Sportman's Music," and makes one wish for a vacation in the hunting season. There are two papers of especial interest to physicians. One is by Talcott Williams on "Animal Locomotion in the Muybridge Photographs," the other, by Rev. Dr. J. M. Buckley, on the "Mind Cure of Disease." This is not the first paper from the same pen, the former ones being also published in *The Century*. They are of the greater value as they come from one especially well qualified to write on the subject. Every physician should study them carefully, and he will be more than repaid for the time occupied. Messrs. Nicolay and Hay continue their interesting history, reaching through the Lincoln-Douglas Debates. Prof. Boyesen and H. S. Edwards, each contributes an interesting story, and Stockton continues his "Hundredth Man."

Washington Gladden's open letter on "Labor and Capital" is practically one of the best things in one of *The Century's* best numbers. Physicians are greatly interested in it, for most of them know all about 'labor,' but much less about 'capital.'

The Forum. The Forum Publishing Company, 97 Fifth Avenue, N. Y.

The Forum reaches the fifth number of the third volume with the July issue. It maintains its high standard of excellence. Prof. Grant Allen continues the series "What is the Object in Life?" He believes in no design for each life by a Creator, but has a good theory as to the best thing we can do since we are here. A paper by Father Huntington on "Tenement House Morality," should be read and studied by every intelligent person in this country. The authority is all the more sure because the author lived in these tenements and among these people and does not obtain his information second-handed.

Prof. Boyesen writes of the "Dangers of Unrestricted Immigration," and Prof. Harris of "Henry George's Mistake about Land."

An admirable remark occurs in Prof. Peabody's paper on "Books that have Helped Me," when he is in doubt whether the same ones will suit anyone else. Just as physicians attain the same end—the curing of the patient—by different modes of treatment, so it has always seemed to us that men may attain the same degree of literary prominence and intelligence by the study of different books.

Those who contend for the opposite plan forget that all brains do not contain the same number, depth, and arrangement of convolutions, and that the gray matter is not always of the same quality and thickness.

Scribner's Magazine. Charles Scribner's Sons, N. Y.

Scribner's Magazine is now, at the beginning of its second volume, placed beside the older monthlies and given as much attention as any of them. It has more than satisfied its friends, and has so thoroughly fulfilled its promise that even its enemies can find little fault. Its price, twenty-five cents for each number, commends it to many people who had heretofore indulged in a poorer style of reading.

Especially interesting to the medical profession is the paper of Prof. Sargent of Harvard, in the July number on "The Physical Proportions of the Typical Man." His views are not imaginative but drawn from the study of 10,000 individuals. A second paper on "Napolean and his Times," by John C. Ropes, is well illustrated, but fails to impress the reader very forcibly because of the author's too great admiration for the hero.

"A Girl's Life Eighty Years Ago," promises to be enjoyable.

A good amount of light fiction for summer reading is found here, including a story by H. H. Boyesen.

The Thackeray letters continue and are among the most attractive things in the *Magazine*. Edith Thomas has a beautiful Sonnet in this number which every lover of poetry should read.

The Critic. The Critic Company, 743 Broadway, N. Y.

The Critic has been informing its readers for some time of the whereabouts of the literary people of the country during the summer months, which is exceedingly pleasant reading for those who can't go to the seashore, the mountains, the St. Lawrence, or the Rhine.

Plenty of material was left at home by most of them, so that the new names on the title pages of the *Magazine* will not be frequent.

In the issue of July 2nd is published a part of the admirable address of R. W. Gilder before the students of the Wesleyan University. This part is on the Colleges and American Literature.

The part relating to realism in modern fiction appears in *The New Princeton Review* for July.

When we read all the complimentary things said and written of *The Critic* by people who know the best when they see it, we are surprised that it doesn't get conceited. It continues, however, to speak modestly of this country and much of Europe.

Good Housekeeping. Clark W. Bryan & Co., Springfield, Mass., sets before us a most delightful bill of fare for July 23rd.

Contrary to the fashionable custom and in accord with the old one which we "old fogies" like, it serves a cup of coffee as the first course. An elegant one it is too, and prepared by Catherine Owen. This is the sixth one which it has provided, each one prepared by "one of the best cooks in the country." After coffee come the "vegetables," "five Creole salads," and "some of our favorites" such as omelet and macaroni and cheese.

During the meal there are many conversations. Ruth Hall tells of "Housekeeping in the Woods," and Catherine Owen continues to talk of "Molly Bishop's Family." Olive E. Dana talks about "Household Literature." Grace W. Soper tells "How Six College Girls Kept House," and May Hamilton brings in the "Refrigerators" which is a delightfully cool thing to do during this hot weather.

Francis W. Johnson, the only *man* who speaks during the meal, except Frank H. Staufer, who presents a poem on "The Ruined Biscuits," does the very comfortable thing of giving every body "A Dip in the Ocean." It has been many a day since we have enjoyed a meal more than this one, and we are still more firmly convinced that *Good-Housekeeping* is a necessity for the best regulated home.

Wallingford. A story of American Life. J. B. Lippincott Co., Philadelphia., is a 12 mo. of 308 pages, in good type, on good paper, and sold at $1.25.

It interests us in that it is written by a Baltimorean, and attracts the physician by its description of student-life at Bellevue Medical College. It portrays traits of character, some of them of a kind not commonly met with, and therefore is interesting to study. Dr. Sheldon, who locates in New York City, has much better luck than young men generally have in cities, and obtains a lucrative practice more quickly than Baltimore physicians do. The lawyer who knows so much more than the doctor and doesn't need any advice, but who isn't so smart after all, is cleverly pictured. It is a pleasant novel with which to rest a tired brain during hours of leisure. One wishes that at some places the author's intended humor might be less coarse and not so "long drawn out."

Miscellany.

American Dermatological Association. — The annual meeting of the Dermatological Association will take place on August 31st and September 1st and 2d in this city, in the hall of the Medical and Chirurgical Faculty. The following are the titles and writers of papers which have been sent in to date to the Secretary.

1. Salt in Dermal Hygiene and Therapeutics. H. G. Piffard.
2. Chronic Inflammation and Infiltration of the External Genitals of the Female. R. W. Taylor.
3. A Clinical Study of Erysipelas in Infants. I. E. Atkinson.

4. Leucopathia Unguinum: a Peculiar Affections of the Nails. R. B. Morison.

5. Notes on Treatment in Ordinary Skin Troubles. R. B. Morison.

6. Protest Against Excessive Strength of Local Application (officinal and other) in Skin Diseases. S. Sherwell.

7. Clinical Notes on Pruritus. L. D. Bulkley.

8. Clinical Notes on Pediculosis. F. B. Greenough.

9. On the Use of Medicated Rubber Plasters in Certain Cutaneous Diseases. H. W. Stelwagon.

10. A Case of Purpura with Circinate Lesions. H. W. Stelwagon.

The Eucalyptol Treatment of Pulmonary Tuberculosis.—At a recent meeting of the Academy of Medicine of Paris, Ball reported 21 cases treated by hypodermatic injections of eucalyptol; 6 died, 10 were much improved and left the hospital, 5 remained under treatment. The influence of the drug was the lessening of night-sweats, diarrhœa, expectoration and fever; and tubercle bacilli disappeared.

Dujardin-Beaumetz reported that in his hands the remedy lessened expectoration, but did not influence the bacilli.

Guiffert, of Cherbourg, had treated 5 cases with marked general improvement. He mentioned 2 cases which Bergeon's treatment failed to benefit, which the treatment under discussion greatly relieved.—*L'Union Médicale*, June 11, 1887.—*Med. News.*

The Treatment of Hepatic Congestion.—Jules Cyr is quoted by the *Revue de Thérapeutique*, of June 15, 1887, as using the following treatment:

1. Application over the liver of compresses of cold water, often renewed; two or three leeches about the anus.

2. At evening, three-fourths of a grain of calomel should be taken, followed the next morning by five drachms of Glauber's salts.

3. As beverage, milk and Vichy water, or seventy-five grains of ammonium chloride in a quart of water.

4. A douch, while the patient is reclining, of water at a pleasant temperature, given over the hepatic region.—*Med. News.*

Sparteine, a Heart Stimulant.—Langgaard reports the following formulæ, which he found useful in eighteen cases of heart disease:

℞.—Spartëin. sulph. gr. 6.
Pulv. rad. liquiritæ
Succ. liquiritæ āā q. s.
Sig.—One or two pills from two to four times daily.

Also

℞.—Spartëin. sulph. gr. 3 to gr. 7.
Aq. destill. ʒ 2½.
Solve.
Sig.—Twenty drops, from two to four times daily, in sweetened water or wine.

℞.—Spartëin. sulph. gr. 3 to gr. 7.
Syr. aurant. cort. ʒ 12½.
Solve.
Sig.—A small teaspoonful in water, from two to four times daily.—*Therapeutische Monatshefte*, June, 1887.—*Med. Mews.*

Cider Vinegar as a Local Antidote to Carbolic Acid.—Dr. Edmund Carleton states, in the *Trans. Int. Hahn. Association*, that, having accidentally dashed about two ounces of pure carbolic acid upon his hands, he applied some cider vinegar with the object merely of removing the odor, there being no antidote known. To his amazement, all the effects of the acid were removed in a few minutes. This chemical action has been verified upon others, and Dr. Carleton asks if it would not be well to try it upon the mucous membrane, when occasion offers.—*N. Y. Med. Times.*

Iodoform Pencils in Soft Chancre.—Dr. Oscar V. Petersen, of St. Petersburg, recommends, in the treatment of chancroid, pencils made of fifty or seventy per cent. of iodoform, together with glycerine and gum-arabic, and enclosed in a wooden holder. In the case of a chancroid ulcer, the pencil may only be applied to its surface, which then becomes coated with a more or less

thick layer of iodoform. The chief advantage of the method is, that the patient remains absolutely free from an unpleasant and tell-tale odor.—*Medical Record.*

THE TREATMENT OF HÆMOPTYSIS.—From an extensive article by Barié, in the *Revue Générale de Clinique et de Therapeutique* of June 16, 1887, we take the following useful formulæ:

Tannin is a remedy most frequently used; its doses are from 9 to 15 grains; or by tablespoonful doses of the following:

℞.—Tannin	gr. 8 to 15.
Tinct. cinnamon	♏. 30.
Syrup. simp.	ʒ 7½.
Aquæ aurant. fl.	ʒ 5.
Aquæ	ʒ 25.

If gallic acid be preferred to tannin, it may be combined with ergotin as follows:

℞.—Acid gallic,	gr. 30.
Ergotin,	gr. 15.
Glycerin,	gtt. 5.
Syrup,	q. s.
Make 20 pills.	

Five pills should be taken daily. In cases where the use of krameria or ratanhia with ergot and digitalis is indicated, the following will be found useful:

℞.—Ext. ratanhiæ	ʒ1.
Ergot	gr. 45.
Digitalis pulv.	gr. 8.

To be made into 40 pills, of which 6 may be taken daily.—*Med. News.*

EXTROVERSION OF THE BLADDER.—Dr. Zesas records in the *Centralblat für Chirurgie*, No. 8, 1887, a successful case of operation for this deformity by the method proposed in 1882 by Professor Sonnenburg. The operation consists in removing the bladder entirely, fixing the ureters into the fissured penis by sutures, and covering the opening left in the abdominal wall by a skin-flap operation.

At the Eleventh Congress of German Surgeons in Berlin, Sonnenburg presented a patient who had undergone the operation, but only a few other cases have been recorded.—*Journal of Cutaneous and Genito-Urinary Diseases.*

THE HEALTH OF THE CROWN PRINCE.—We are pleased to be able to state that the Crown Prince continues to make satisfactory progress. He can now make his voice heard distinctly, though, of course, very faintly; the congestion caused by the cold from which he was suffering last week has almost entirely disappeared; the slight reaction following the last operation has subsided, and there is not the least sign of recurrence of the disease. The base of the growth will probably require a little further treatment later on. His Imperial Highness's general health is excellent, and his sprits are much improved. Although Professor Virchow's report on the microscopic appearances of the portion of the growth last removed has not yet been formally sent in, we hear from Berlin that it is entirely confirmatory of the favourable opinions already given by the eminent pathologist.—*Brit. Med. Jour.*, July 9th, 1887.

PROPHYLAXIS OF CROUP.—This subject had been studied by Dr. Dumas for several years; he has tried a great many substances with this object in view. The agent which he thinks best of is iodine given internally in quantities not exceeding eight drops *daily*. He gives it in orange-flower water, sweetened with syrup, and adds a little iodide of potassium. He quotes a number of cases where there was every reason to suspect an attack of croup, where the use of this remedy appeared to prevent the onset.—*Arcn. of Gynæcology.*

Frænkle is convinced from certain experiments that the typhoidal virus infects the system through the alimentary canal; but that there must exist a certain predisposing condition of the stomach—a condition best secured in animals by starving until of intestines are empty.—*Canadian Practitioner.*

Medical Items.

Professor Virchow has arranged to accompany Dr. Schlieman on his visit to Egypt next spring.

The American Rhinological Society will meet in Washington, D. C., September 1st, 2nd, and 3rd.

Secretary of State Bayard has consented to deliver an address of welcome to the Ninth International Medical Congress.

M. Pasteur, it is said, expresses profound satisfaction with the report of the British Investigating Committee on his work.

A Sanitary Convention under the auspices of the State Board of Health will be held at Traverse City, Michigan, on August 24 and 25, 1887.

The widow of the late Dr. Alfred Meadows has presented the library of this distinguished gynecologist to the British Gynecological Society.

The approaching marriage of the daughter of the late Professor Schroeder to Professor Hoffmeier is announced. Professor Schroeder left nine children.

St. Lukeland's, the Summer Cottage Hospital, located near Catonsville, Md., is now open for the reception of patients. This is one of Baltimore's most useful charities.

A branch of the British Medical Association has been formed in Halifax, under the name of the Nova Scotia Branch of the British Medical Association. This is the first Branch of the Association in North America.

Roundtrip tickets from Washington or Niagara Falls to California will be issued to foreign and American members of the Medical Congress at the rate of $90, or less than the usual railroad fare one way. The Pullman sleeping car for the trip is $14 additional.

Sommerbrodt gives the result of his treatment with kreasote of about five thousand cases of tuberculosis of the lungs and larynx, continued over a period of nine years. He gave the drug in gelatine capsules, and believes cases have been cured.—*Canadian Practitioner.*

Gifts to Hospitals.—The Misses Drexel, of Philadelphia, have given $30,000 to St. Agnes Hospital of that city. Ex-mayor Carter Harrison, of Chicago, has given $1,500 to Michael Reese Hospital of that city in the name of his deceased wife, Margarette Stearns Harrison.

Professor Schroeder enjoyed form his practice an income of 250,000 marks annually; Gusserow, 150,000 marks; Martin, 100,000 marks; while Waldeyer, from his teaching, realizes 25,000 marks yearly. Martin has been known to ask and receive 4,500 marks for an ovariotomy.—*Medical Record.*

The Library of the Surgeon-General's Office is now being moved into the fire-proof building erected for its special use on the Smithsonian grounds. Books are not available for use until after the first of September, by which time the Library will be safely established in its new and permanent quarters.

Mackenzie's Fee.—Some inventive newsgatherer has started into circulation the report that Dr. Morell Mackenzie's bill for treating the Crown Prince is $13,000. Monarchies may have their faults, but it is perfectly safe to say that Dr. Mackenzie and his colleagues will be better rewarded than were the surgeons who took care of President Garfield.—*Medical Record.*

A Remedy for Neuralgia.—It is claimed that a few drops of the following—eau de cologne, ether, chloroform, aa ʒiij.—poured on a handkerchief previously wetted with cold water, and placed on the seat of a neuralgic pain gives instantaneous relief. It is also very efficacious for nervous headache. A burning sensation is felt at first, but quickly disappears.—*Medical Record.*

Dr. Russell, medical officer of Glasgow, is reported to have said, that, during the last ten years over a million articles (from persons affected with every kind of contagion known in this country) have passed through the Glasgow laundry, and that he has never known a case of interchanged disease, although the women engaged in the laundry have occasionally suffered from handling the linen before the boiling process.—*Boston Med. and Surg. Jour.*

Personal.—A large number of physicians residing in this city are enjoying a much needed rest at various summer resorts and country homes. We have learned of the whereabouts of the following gentlemen. Dr. W. T. Howard is at the Blue Mountain House, Md. Dr. J. E. Michael is recuperating at the beautiful residence of his brother, Mr. Charles Michael, in Harford county, Md. Dr. H. P. C. Wilson is at Deer Park. Dr. R. T. Wilson is travelling in Europe. Dr. W. P. Chunn is at Capon Springs, W. Va. Dr. T. Barton Brune is at Deer Park. Dr. H. C. McSherry is spending the summer at his delightful residence in Howard county, near the Relay House. Dr. R. B. Morison is sojourning for the summer in Long Green Valley, Baltimore county, Md., at the charming home of Mr. Geo. H. Williams, his father-in-law. Drs. F. Donaldson Sr. and Jr., pass their nights at the country residence of the former, on Lawyer's Hill, Howard county. Dr. P. C. Williams is sojourning in the North. Dr. N. R. Gorter is passing the the summer in Europe. Quite a number of other well-known physicians are out of the city but we are unable to locate them.

Original Articles.

PRACTICAL NOTES ON THE TREATMENT OF SKIN DISEASES.

Hypertrophies of the Epidermal and Papillary Layers.

BY GEORGE H. ROHÉ, M.D.,

Professor of Hygiene and Clinical Dermatology, in the College of Physicians and Surgeons.

(*Continued from last issue.*)

WARTS.

Warts are outgrowths of the skin composed of hypertrophied papillæ covered by masses of epithelial cells. They are of various shapes, filiform, pedunculated, or seated on a broad base. Their surface may be smooth or rough and irregular. Sometimes the surface is granular, constituting the so-called "seed wart."

These growths are very frequent, especially in children and young persons. Their favorite seat is upon the fingers, though the filiform and pediculated varieties are not rarely found upon the scalp, eyelids and neck. They are not entirely harmless, as they sometimes, though seldom, undergo malignant degeneration.

Warts are popularly believed to be contagious. Among country people the urine of the toad is credited with the production of these growths. Inoculation experiments have failed to demonstrate their contagiousness.

In one variety of these structures, the pointed condylomata or gonorrhœal warts, the causation is evidently dependent upon the irritation produced by acrid discharges. This variety is usually found upon the genital organs, and by the aggregation of a large number of papillary prolongations, may produce cauliflower-like excrescences. They frequently secrete an offensive acrid fluid, which apparently has the property of reproducing the growths wherever it comes in contact with skin. Hence has arisen a wide-spread belief in their origin by contagion. This has not been absolutely demonstrated, but seems probable.

The removal of warts is easily accomplished by excision, cauterisation, or electrolysis. When large and situated upon loose, movable skin they may be picked up between the thumb and forefinger of the left hand and snipped off with sharp scissors. The wound may be dressed with dry lint or some simple ointment.

Most practitioners use caustics, fuming nitric acid being the favorite. Where many warts are cauterised at the same time, however,and especially when they are seated over joints, as the knuckles, the process is not entirely devoid of danger. I have seen a pretty serious case of erysipelas with extensive suppuration, leaving ugly scars, in a case in which I had destroyed a number of warts on the hands of a young girl. I have likewise seen a deep, painful excavation produced on the scalp by the same means.

One method of destroying warts which is pretty efficient, is to transfix the growth with a needle and then heat the end of the instrument in a spirit lamp. The needle gradually becomes hot and produces a slow cauterisation. The wart shrivels up and drops off in a few days.

The salicylated collodion recommended for the cure of corns is also useful. It will cause a gradual disappearance of the growth without producing any pain. The following may also be used :

℞.—Hydrarg. bichloridi, gr. xv.
Collodii flexilis, ℥j. M.
S.—Paint on the warts once a day until they drop off.

Recently the internal use of sulphate of magnesia in doses of ten to twenty grains three times a day has been recommended as a cure for warts. It is said to cause their disappearance in two to three weeks. I know nothing of its merits from personal experience.

In my hands the best results have been obtained with electrolysis. The

base of the wart is transfixed by a fine needle forming the negative electrode of a galvanic battery. From six to twenty cells may be used. The circuit is completed by an ordinary sponge anode held in the hand. In a few minutes the wart turns pale, and slight frothing occurs around the needle. The circuit is then broken with the anode, and the needle withdrawn and passed through the growth at right angles to the former puncture and the circuit again made. In this way the wart is pierced in various directions until the base seems to be entirely disorganized. In a week or ten days usually the wart drops off leaving a dry, non-cicatricial base. The pain of the operation is less than when excision or cauterisation are used, and there is rarely any scar. When thoroughly done no return of the growth need be feared.

CUTANEOUS HORNS.

These hyperplastic growths of the epidermis are very rare. They often start from altered sebaceous glands, but in some cases there is also hypertrophy of the papillæ. In many cases they seem to be mere outgrowths from the epithelial layer, their basis resting flat upon the skin, and may be torn off without causing pain, bleeding, or other symptoms. In those cases where the papillæ are enlarged, moving the horn will cause pain and bleeding. From personal observation of a case I am inclined to believe that this form of horn is especially liable to malignant degeneration of its base. From the statistics I have examined I am led to conclude that ten per cent of the cases of cutaneous horns are followed by cancer of that portion of the skin where the horn is attached.

These curious structures sometimes grow to a great size. Wilson reports one in a Mexican which was fourteen inches in circumference around its shaft and divided above that point into three branches.

The most frequent situations of horns are the head, face, and genital organs, although they may be found upon any portion of the body. They are more frequent in women than in men.

Cutaneous horns are outgrowths of epithelial tissue. If removed they show a great tendency to recur, unless the base is thoroughly destroyed or excised. The liability to cancerous degeneration should be borne in mind.

The best method of removing these morbid structures is probably by excision, taking enough of the base and surrounding tissue away to remove any chance of recurrence. Cauterisation of the base with caustic potash or the thermo-cautery would doubtless also be efficient, if thoroughly done.

The sebaceous glands in the sulcus behind the glans penis sometimes secrete a smegma which becomes cornified and causes a sort of horny growth which completely covers the glans. These cases are exceedingly liable to be followed by epithelioma. The horny material should be softened with oil dressing or poultices and if cancerous degeneration has not yet taken place, the normal function of the glands may be restored by the constant application of a weak sulphur ointment. If the organ is already cancerous, of course the only procedure indicated is amputation.

(*To be continued.*)

PRACTICAL NOTES ON DISEASES OF THE RECTUM.

BY S. T. EARLE, M.D.,

Professor of Rectal Surgery in Baltimore Polyclinic and Post-Graduate Medical College.

THE PRINCIPAL POINTS IN THE ANATOMY OF THE RECTUM.

The rectum is the terminal extremity of the alimentary canal, and comprises the portion of the large bowel between the end of the sigmoid flexure and the anus. Its beginning at the end of the sigmoid flexure is indicated by a slight constriction; below this it expands into a pouch which serves as a receptacle for the fæces when from any cause they are retained, and again contracts suddenly

at the anus under the grasp of the sphincters.

It varies in length in different persons from six to eight inches. It is curved both laterally and antero-posteriorly; the latter, two in number, are important from a clinical standpoint. In the first of these antero-posterior curves it follows that of the sacrum and coccyx until it reaches a point opposite the end of the coccyx, when it reverses its course and runs directly backwards, ending in the anus about one inch in front of the tip of the latter bone; hence in making a digital examination, or introducing a speculum direct it first towards the pubis, until within the internal sphincter, then backwards and upwards.

Its relations with other organs in the pelvis are important, especially from a surgical standpoint. Starting at the anus and proceeding upwards towards the pubis for one and a half inches on the anterior portion of the rectum we come in contact with the tip of the prostate gland, which impinges on the anterior wall of the rectum at the most convex portion of the anterior curve; following now the curve backwards and upwards from the tip of the prostate to a point opposite the third sacral vertebra we find the anterior wall in contact with the prostate, base of the bladder, and seminal vesicles in the male, and the vagina in the female, at its upper portion often with Douglas' cul-de-sac. The length of this position of the rectum is about three inches. At the beginning of the upper third of the rectum, about opposite the third sacral vertebra is formed a very important relationship with the peritoneum, one of special importance to the surgeon in all high operations on the rectum; it is the reflection of the peritoneum from behind to the sides and anterior portion of the rectum. It must be remembered that while the measurements as given to this point from the anus will aggregate four and a half inches, such distance is obtained at the expense of the curves of the rectum. The actual distance between the anus and this point where the peritoneum leaves the anterior wall of the rectum to form Douglas' cul-de-sac, which is very important to know, varies in different subjects, and (in different conditions of the bladder and rectum) in the same subject. After comparing the measurements as given by different authors it may be safe to place it at three inches. In new born children,however, the distance is very much shorter, Douglas' cul-de-sac approaches to within an inch of the anus, and the distance gradually increases as the subject approaches puberty. The relations of the entire upper portion of the rectum from above the third sacral vertebra are very important, being included in the peritoneal cavity; besides being in close proximity to the sacral plexus of nerves and braches of the internal iliac artery, it also lies in contact with convolutions of the small intestines on either side, and in front with the bladder in the male, and the uterus in the female.

The rectum terminates below in the anus, which is kept tightly closed by the sphincter muscles, of which there are two, the external and internal; the skin over the anus is thin and pigmented, and dips deeply into the anal orifice where it joins the mucous membrane. The rectal wall is composed of four layers, the external, or peritoneal layer, which as has been seen when speaking of the surgical relations of the rectum, only exists in about its upper third; the muscular, the submucous, and mucous layers. The peritoneal layer has already been sufficiently alluded to. The muscular layer while resembling the rest of the alimentary canal in the fact that it consists of two layers, an external longitudinal and an internal circular, differs from it all, except the œsophagus, in that the two layers are uniformly distributed and not interlaced,and farther,in that the longitudinal fibres instead of being collected into three distinct bands as in other portions of the canal, are here spread tolerably evenly around the entire circumference of the rectum, being however, rather thicker in front. Some of the longitudinal fibres pass over to the posterior wall of the bladder with the reflection of the peritoneum binding these two organs more firmly together. Some of the longitudinal fibres in ter-

minating, after reaching the space between the sphincters, turn up and after pursuing this course for an inch or more, are inserted into the mucous membrane; others pass between the bundles of fibres of the external spincter to be inserted into the subcutaneous connective tissue, while others still are inserted by an elastic tendon into the sacro-coccygeal ligament. The circular fibres terminate with the internal sphincter which is merely an aggregation of them into a band of from half an inch to an inch in its vertical measurement, and situated just above the external sphincter. The submucous layer is just within the muscular, and supports the mucous layer; it is very lax and allows of considerable movement of the mucous upon the muscular layer; fibrous processes from it dip down between bundles of the muscular layer binding the different layers together. In this layer the blood and lymphatic vessels ramify. The mucous layer differs in some particulars which adapt it to its locality and function from that found in other portions of the alimentary canal; is more muscular, glides more freely upon the tissues beneath, and is so abundant that it is gathered into folds, which may and sometimes do mislead some to suppose they are bands of false membrane, a partial stricture. At the anus where it connects with the skin it is gathered into vertical folds known as the columns of of Morgagni; between the lower end of these columns little arches are stretched from one to the other forming little pouches; they are much more developed in the aged than the young, and may retain small portions of foreign matter, seed etc., which may give rise to supuration. It is upon these little pockets that certain quacks have of late years spent their energies, and probably filled their coffers, claiming that they are very dangerous and should be cut out,and have gone so far as to invent special instruments for the purpose. The mucous membrane consists of three layers, a deep or muscular layer, muscularis mucousæ, which although found throughout the alimentary canal is more strongly developed here; its object is to retain the mucous membrane in position and prevent protrusion of the membrane. A glandular layer which consists principally of tubular depressions that study the membrane very thickly and are known as Lièberkuhns follicles; they serve the purpose of increasing the absorbing surface; with here and there a solitary mucous follicle placed deeper than the follicles of Lièberkuhn, their position being indicated by slight depressions due to the absence of the latter follicles over them; there are also just within the internal sphincter a number of compound racemose mucous glands. The most superficial layer is the epithelial, which is of the columnar variety. Of the muscles which belong specially to the anus and rectum I shall only speak of the external sphincter as being the only one, besides the internal sphincter, which has been already described, that particularly concerns the general practitioner. It is a thin band of voluntary muscular fibres, elliptical in shape, which surrounds the margin of the anus, and is attached posteriorly by a tendinous band to the coccyx, and anteriorly to the tendenous centre of the perineum. Its object is to close the anus and voluntarily to antagonize the proper dilators of the anus, and the peristaltic action of the bowels. It is this muscle and the internal sphincter that are cut in the operation for fistula in ano. The arteries of the rectum are the superior hæmorrhoidal, which is single and is a direct branch of the inferior mesenteric; the two middle hæmorrhoidal, and the two inferior hæmorrhoidal. There are also three sets of veins, the superior, middle and inferior; and these are so arranged as to form two distinct venous systems, the one rectal, made up of the superior hæmorrhoidal, which empties its blood by the inferior mesenteric into the vena portal; the other anal, made up of the middle and inferior hæmorrhoidal and returning its blood through the internal iliac. "The nerves of the rectum and anus are derived from both the cerebro-spinal and sympathetic systems. The former from the sacral flexus, the latter from the mesenteric and hypogastric lexuses." The distribution of

the nervous supply is principally to the lower part of the rectum and around the anus; the middle and upper portions have very little sensation. The tonic contraction of the external sphincter has been quite satisfactorily attributed to a special nerve centre located in the lumbar region of the cord. "If the nerve connection with the spinal cord be served relaxation of the muscles takes place."

(*To be continued.*)

ETIOLOGY AND DIFFERENTIAL DIAGNOSIS OF TYPHOID AND TYPHO-MALARIAL FEVERS.*

BY PIERSON CHAPMAN, M.D., PERRYMANSVILLE, MD.

In discussing this subject, I am fully aware that a large and influential number of our profession doubt and even deny the correctness of the term Typho-Malarial Fever, but I am a decided advocate and follower of Woodward, Flint, Hume, Hirsch, Griesinger and many others, that the nomenclature is correct and better suits the disease or dual disease in question than any other yet used. F. de Habilland Hall, of London in his work on Differential Diagnosis, says "The experience of numerous observers has proven that there is a complex form of fever prevalent in malarious districts in which the typhoid and miasmatic elements are combined." It has been proposed by Dr. J. J. Woodward to call this typho-malarial fever a term which he explains to be applied not to a specific or distinct type of disease, but the compound forms of fever which results from the combined influence of causes of the malarious fevers and of typhoid fever. In order to bring into relief the broad distinction between the typhoid and malarial fevers when in their typical forms, the following comparative table has been prepared by Dr. E. M. Hume.

TYPHOID.	MALARIAL.
Cause.	
Decomposing animal and vegetable matter.	Emanations from marshy, damp, low, or new soil, always vegetable never animal.
Locality.	
Old soil, may be high and dry and long settled.	New land, moist, low, and swampy.
Circumstantial Evidence.	
Epidemic of typhoid fever.	Prevalence of malarial disease.
Age.	
Seldom after forty.	All ages.
Periodicity.	
Continues without intermissions or remissions.	There is either intermission or remission.
Duration.	
Lasts 3 or 4 weeks, can not be interrupted.	Can be interrupted and cured in a few days.
Nervous Implications.	
Great nervous disturbance and prostration; dull, heavy, throbbing, persistent frontal headache; twitching of muscles, tickling of the throat, ringing in the ears, deafness, mind stupid.	None.
Delirium.	
Asthenic, not wild.	Sthenic.
Epistaxis.	
Frequent.	None.
Lungs.	
Diffused bronchitis, with tough, tenacious sputa.	Congested when affected at all.
Pulse.	
From 70 to 140 beats per minute, small, irregular or double.	More frequently high, full, and bounding.
Skin.	
Hot, even when moist, emits a peculiar musty odor, pathognomonic of this fever.	Dry and hot, odor acid and swampy.
Thermometer.	
Indicates an in-	Rises rapidly to 105

*Read before the Harford County Medical Society August 9th, 1887.

crease of temperature from morning to evening of about two deg., and a decrease of one deg., from night to morning, commences first day 98.05 deg., reaches its maximum of 104 deg. on the morning of the fourth day; from this time the evening temperature rises from 103 to 104 deg., morning one deg. lower.	deg., or more first day or two, and falls suddenly; is not so uniform.
Tongue.	
Protudes tremblingly, is covered with a whitish yellow coat, which disappears and is replaced by a dry pale, brown one, with red glazed tip and edges; teeth covered with dark brown sordes.	Coated all over with a heavy dark yellow coat, no sordes.
Complexion.	
Pale, livid, muddy, cheeks flushed.	Sallow, eyes yellow.
Urine.	
Foaming, light color, free from sediment, frequently contains albumen, has typhoid odor like body.	Dark color, turbid, no albumen.
Excretions from Bowels.	
Diarrhœa except in mildest cases, stools offensive, pea soup, bright yellow or brown, devoid of mucus but sometimes contains a white floculi.	Bowels costive, dark, hard, dry, bilious stools.
Abdomen, Shape, Etc.	
Tympanitis occurs giving the shape to abdomen, etc., pressure over secum produces pain and gurgling sound, tenderness over spleen.	No tympanitis or tenderness of abdomen.
Pain.	
Stomach not involved, no severe pain anywhere except where peritonitis occurs.	Gastric disturbance and vomiting of bile, pain in stomach and elsewhere very intense.
Eruptions.	
Occur during second week, from one to twenty small rose colored pimples size of pins head, appear on abdomen, cheeks or breast, do not extend to extremities, present no distinct elevations to the touch, disappearing upon pressure, but reappearing upon removal; last about 3 days; fade away and a fresh crop appears. This eruption is claimed to be peculiar to and absolutely diagnostic of typhoid fever. Later in the fever sudamina occurs.	Eruptions of different kinds sometimes occur, but are so different in shape, feel, duration, number, extent and place, that they need never be mistaken for the typhoid eruption.
Mortality.	
Great, average one in five.	Very slight, not one fatal case in 100.
Lesions.	
Inflammation or ulceration of Peyer's solitary and Brunner's glands; perforation of bowels, with peritonitis and fatal hemorrhage, inflammation and enlargemeat of mesentery glands, and the spleen, which sometimes *bursts*; the brain, stomach, liver and lungs sometimes inflamed.	Hemorrhage from congestion of bowels rare, congestion of stomach, lungs, liver and spleen; the two latter enlarged.

Then he goes on to say, "We shall now consider the characters of a disease presenting in its different stages symptoms both of malarial and typhoid fever. The name *Remittent Typhus* was given it by Dr. D. Drake, who also spoke of it as 'the typhoid stage of remittent or autumnal fever.' He does not consider it a distinct disease, but a genuine hybrid of typhoid and remittent fever. He remarks that in many cases the stage of invasion is nearly the same length in both; both attack males more than females; and that when remittent terminates fatally, subsultus tendinum, a dry tongue and intestinal hemorrhage are sometimes present. He has, however never seen a decided intermittent pass into typhoid; nor well marked typhoid terminate in an intermittent."

Pending and during the war typho-malarial fever attracted much attention and its traits have been thus distinguished against simple typhoid.

TYPHOID.	TYPHO-MALARIAL.
Typhoid occurs in all localities, most commonly in the North.	Typho-malarial only in miasmatic localities most commonly in the South.
Invasion gradual and without remission.	Often begins as a simple remittent or intermittent.
Daily exacerbations and remissions slight.	Decidedly marked.
Diarrhœa the rule.	Constipation the rule.
Tympanites common.	Tympanitis rare.
Abdominal tenderness considerable, epigastric and hepatic, tenderness slight.	Abdominal tenderness slight, epigastric and hepatic tenderness considerable.
Temperature comparatively low, delirium low and muttering.	Temperature high, especially on outset, delirium active.
Spleen not involved.	Tumefaction of spleen very marked.
Sordes on teeth the rule.	Sordes rare.
Peyer's glands always involved.	Rarely involved.
Rose eruption present.	Generally entirely absent.
Pigment deposits absent.	Pigment deposits in various tissues and organs very common.

Libert in Ziemssen's Cyclopediæ of the practice of medicine well describes the disease under the title of *Bilous Typhoid* or *Relapsing Fever*, and goes on to state Griesinger's descriptions, which are elaborated from his rich Cairo material,and may be rightly regarded as opening the way for the reception of *bilious typhoid* into *pathology*. A few months ago a self righteous and a self-made physician from the State of Texas wrote to the *Medical and Surgical Reporter* of Philadelphia, or *The World*, an *ipsedixit* article proclaiming that the *physician* who speaks of typho-malarial fever, has either never his seen case in time, or badly treated a case of intermittent or remittent fever. Why? *Ans.* I called to see a case, supposing it an ordinary one of intermittent fever and began to treat it as hundreds before, running the ordinary course, with ordinary remedies, and in from four to six days my case, chills and intermissions ceased, and it lapsed into a continued fever with rising evening and falling morning temperature, tongue at first yellow coated, then dry brown, cracked; abdomen tympanitic, right gurgling, ileac tenderness, hemorrhages from bowels, generally oft repeated and my patient dies in from two to four weeks, generally at the end of the second from hemorrhage from the bowels, with all defined symptoms of typhoid, but beginning as an ordinary case of intermittent. My inference is that two distinct poisons may exist at the same time in the same body—it is questionable; the greatest will make the greatest manifestation. If the marsh effluvia predominates we have its effects fully portrayed; —if vegetable and animal poison combined predominates we have typhoid, put the two together, and we have the dual result, typhoid and malarial fever, and no typhoid condition of two specific poisons ever exist in the same subject. Typhoid condition as I understand it means low—low is an entity in medicine as in other things. The typhoid poison is a distinct product of all bad causes, with specific manifestations—animal, vegetable, atmospheric and paluvial, or any of these combined. Malarial poison is entirely vegetable and paluvial, generated by heat and moisture. In malarial or low swampy districts we have exceptionally typhoid—generally the malarial poison and type, the two are *sometimes* combined, which seems to me is most properly termed *typho-malarial* fever.

Selected Articles.

THE MALADIES OF OLD PEOPLE.*

BY PROFESSOR HUMPHRY, M.D., F.R.S.

Professor of Surgery in the University of Cambridge.

The following remarks are based upon the analyses derived from the accounts of 824 persons, which were given, with few exceptions, by medical men, and which were in reply to the inquiries of, and upon the forms issued by, the Collective Investigating Committee of this Association. Of these 824 persons, there were 340 males and 282 females between 80 and 90, and 92 males and 110 females between 90 and 100.

*From *British Medical Journal*, July 16th, 1887.

I may first observe that, with regard to *Diseases and Failures of Particular Organs*, the immunities were in favor of the women, amounting to 55 per cent. in the case of the men. The affections of the urinary organs especially preponderate, as we might expect, in the men. They are, indeed, more than twice as frequent in the men as in the women, amounting to 42 per cent., whereas in the women they were only 20 per cent. In the women, brain affections are more frequent than in the men, being 16 per cent. to 7 per cent. But the failures in the heart and in the lungs are about equal in the two sexes. It is worthy of note that 85 per cent. of the whole number are reported to be free from any evidence of rheumatic affections of the hands.

Of the various maladies, *Bronchitis* is the dominating one, and, superadded to debility, it is oftener than any other assigned as the cause of death. It is, indeed, including the common winter cough, a very frequent malady in this climate at all times of life. In the aged it is liable to become persistent; and a slight increase coming upon the enfeebled circulation and general weakness of the old person often produces a fatal result. The demands on the activity of the respiratory functions are, it is true, diminishing in the aged in proportion to the diminished activity of the nutritive and other processes; but the respiratory capacity, which depends much upon the elasticity of the thoracic walls and of the pulmonary tissue, is liable to diminish in still greater ratio. Hence the expiratory movements, which are in great measure the resultants of elasticity, are performed incompletely and with effort, and the expulsion of mucus from the air-passages is effected with difficulty. Thus a continual source of irritation is provided, which, on slight provocation, extends into the smaller bronchial tubes, and is reluctant to quit its hold there. In a few cases the affection was habitual and had been so for years. In some there had been recurrence of attacks of considerable severity, with complete recovery, at a very advanced time of life.

It will probably accord with the experience of those present that some combination of sedative with stimulant medicines affords more relief in these cases than any other treatment.

With regard to the *Heart* we do not get much evidence of disease. Some irregularity or intermission of pulse was noted in about a fifth of the cases observed. In a few there were stethoscopic indications of valvular disease without any other symptoms. Whether the œdema of the legs observed in certain cases, and which we are familiar with as an occasional temporary affection in old people, is attributable to an imperfection in the heart, or to some other cause, I do not know. A knotty condition of the arteries, indicative probably of calcareous degeneration is reported in 12 per cent.

The *Brain* affections, and the recoveries from them in old people, are among the most remarkable of their maladies. We are all familiar with the fact that passing attacks of unconsciousness, whether they depend upon temporary congestion, or mere suspension of cerebral activity, or other causes, are by no means uncommon, and leave often no permanent diminution of mental power. The impairment or loss of motor power in some part, as a limb, is, of course, a serious addition, forasmuch as it commonly indicates a lesion or decided failure in some locality of the brain, probably of the same nature as we find in similar attacks in less advanced age; and a paralytic seizure not infrequently ends the long but not necessarily strange or eventful history. But we are surprised to find how even these attacks in the aged are not infrequently more or less recovered from. Thus there are 25 cases in which brain-attacks associated with paralysis, in most instances hemiplegia, and in some some with convulsions and unconsciousness, were in greater or less degree recovered from. In some the recovery was complete. One man had three attacks of paralysis, at 82, 85, and 86; and one woman, in addition to several attacks of unconsciousness, had left hemiplegia and convulsions at 78 paralysis of the left hand at 82, and severe

apoplexy at 89, after which she was able to get about again, though with weakened mind and liability to epilepsy.

While considering this point we do not forget that in the aged person the brain is gradually and progressively shrinking, and the interspace between it and the skull caused by this shrinkage is being filled by fluid effusion in the subarachnoid or pia mater tissue; and there may be temporary irregularities and imperfections in this compensating adjustment of pressure of fluid on the surface and of the blood circulating in the interior, which would to some extent account for these cerebral attacks, and also for the recoveries from them. The senile alterations in the arterial coats must also be an important item; but our knowledge of the physiology of the cerebral circulation is at present scarcely sufficient to enable us to make clear deductions respecting its pathology.

In only 11 out of the 340 returns of men between 80 and 90, and in only 1 of the 92 returns between 90 and 100, is *Prostatic Disease* said to have existed; in one of these it had existed several years, and in others two, three, and four years respectively. In one the affection is said to have given less trouble than formerly. The condition of retention relieved by frequent use of the catheter may be extended with care over many years; but the enlargement of the prostate, with its associated bladder-symptoms, is, I fear, a malady from which recovery, even in old age, is scarcely to be expected. It is something to find that our reports confirm the view that it is a malady from which age gives, after 70, a gradually increasing exemption.

Fifty-two were troubled with *Rheumatism* in some of its many forms, which include pains in the limbs, aching in the bones, etc., for which, I suppose, a remedy is not very easily to be found. Indeed, it is difficult to define precisely, or clearly account for, the various pains, rheumatic and other, which old people complain of, and which disturb their comfort without materially affecting their health. The women suffer from these even more than the men, probably in consequence of the nervous system in them being more on the alert, 5 of the men and 6 of the women had gout, all these being between 80 and 90.

Two cases of *Senile Gangrene* were noted. They were in men above 90.

The severe forms of *Malignant Disease* are rare. One man, above 80, had rapidly advancing sarcoma of the shoulder; 5 women, between 80 and 90, had cancer of the breast; 5 men and 1 women, had epithelioma; and 1 man and 1 woman had rodent ulcer. None of these maladies are mentioned in the men or women above 90. Still, although the very aged appear to be less liable to some of the more severe diseases, such as cancers and diseases of the urinary organs, they are, on the whole, rather more liable to the ordinary maladies, the proportion of those above 90 who were altogether exempt from malady being 34 per cent., while those between 80 and 90 was 43 per cent.

With regard to the *Eye*, 8 per cent. are stated to suffer from cataract, 80 per cent. are said to have good sight, although 83 per cent. use glasses. Some have used glasses for many years, which is confirmitory of what I said in the account of the centenarians, that "the occurrence of presbyopia does not seem to be associated with, or to be a prelude to, inconvenience or impairment of sight beyond that which may be corrected by glasses."

The more frequent failure of the organ of *Hearing*, which is noted in more than one-half (56 per cent.) of the returns, is probably due in great measure to the liability to impairment of the delicate mechanism of the middle ear—the tympanum with its membrana tympani, its ossicles with their joints, its muscles, its Eustachian tube, and its lining membrane—in consequence of colds, shocks, and a variety of causes. But in comparing the organ of hearing with that of sight, in this respect, we must not forget that the lessening of elasticity and muscular activity—which we must assume to induce defects in hearing in old persons corresponding with the visual defects classed under the term presbyopia—does not, like the latter, admit of alleviation by an early applied

physical apparatus. At least, nothing corresponding to the portable and convenient lenses for presbyopia has yet been adapted to meet the auditory defects which may be attributed to a presbyotic condition.

In 4 per cent. only is the *Digestion* said to have been bad. In 71 per cent. it is reported as good, and in the remainder moderate. Very few were troubled with constipation. In 62 per cent. the appetite is reported to be good; and by far the greater number are stated to be good sleepers.

I am continually seeing and hearing of instances confirmatory of the inference as to the reparative powers of the aged after fractures, wounds, and ulcers, which were based upon the returns furnished in reply to Collective Investigation inquiries, and which I have already published (Journal of July 12th, 1884). These inferences are so contrary to preconceived notions, indeed, to probabilities, that it takes some time and effort and frequent repetition to obtain for them a fair measure of acceptance; but I think the reparative powers of age are becoming more accredited, and that we shall ere long cease to have age adduced as a reason against the hopeful, and therefore careful, treatment of fractures, wounds, and sores in the octogenarian, the nonagenarian, and even in the centenarian.

What is even more remarkable than the healing powers of the aged after local lesions are the reparative powers evinced by them after illnesses, as shown by numerous examples of those between 80 and 100, and also by some of the centenarians, which have been already published (Journal of December 11th, 1886). Indeed, the recoveries from severe attacks of bronchitis, pneumonia, apoplexy, and paralysis indicate the reparative powers after illness as well as after accident to be among the most interesting of the senile features. It is certainly strange that, when the other nutritive forces are failing—wearing out as it were—those which are concerned in the work of repair, which may be regarded as, next to development, the highest effort of nutrition, should hold their ground so well. I have on former occasions (Journal July 12th, 1884, and May 9th, 1885) instanced some other conditions in which the same contrast is observed, notably that of the healing of the stump after separation of a part following gangræna senilis, where the structures next to those which were unable to maintain their vitality at all often evince so much granulating and cicatrising energy. As an illustration of this, I have at the present time, in Addenbrooke's Hospital a man aged 77, with calcified arteries, in whom the right great toe and the left second toe have mortified and separated, and the parts left have healed well and soundly, the head of the metatarsal bone of the hallux being covered by a large cicatrix, which must have formed with difficulty at any period of life; and cicatrisation is now going on rapidly on the surface left by sloughing and ulceration on the inner side of the left great toe. Attention has quite recently been drawn by Dr. Harley (see *Lancet* of June 18th) to certain facts which seem to have a bearing upon this point.

He observes that high breeding in most animals conduces to a marked diminution in the bodily recuperative capacity; also that the higher bodily recuperative capacity shown to be possessed by all men living in a rude state, whether in the form of savages or in the gipsy or tramp wanderer among ourselves, arises from the fact that the refining influences of civilisation materially diminish the animal recuperative capacity. We are familiar also with the great reparative powers exhibited in some of the lower animal forms as compared with those in the higher animals. It would seem that the greater sensitiveness—that is, irritability or susceptibility of the nervous system and of the tissues generally—which is associated with higher organisation, where we may suppose the balances of nutrition to be most delicately swung, are, in a measure, unfavorable to reparative work. We can quite conceive that the calm, quiet processes upon which it depends are less likely to proceed in an orderly and uninterrupted manner under conditions of

high excitability, where stimulus easily engenders disorder, than under lower vitality and less susceptible circumstances. Herein, possibly—namely, in the lower and slower excitability of their tissues—may be found an explanation of those recuperative powers of the aged to which I have referred, and of which it is practically important that we should take due account.

Abstracts and Extracts.

Malaria, and American Scientific Observation.—In his voluminous work on General Pathology, just issued from the press, Professor Klebs argues in a despairing sort of a way in favor of the pathogenic importance of the bacillus malariæ discovered by himself and Tommasi-Crudeli in 1879. No notice is taken of the critical investigations of Sternberg in 1880, or of the more recent observations of Councilman and Abbott in 1884, and of Sternberg, Councilman, and Osler in 1886, which seem to negative the "discovery" of Klebs. Marchiafava and Celli, who described the plasmodium malariæ in 1883, and Laveran, who discovered the flagellate organisms (oscillaria malariæ), which he regards as the cause of malarial fevers, receive scant courtesy at his hands. Klebs does not only doubt the pathogenic nature of the plasmodium of Marchiafava and Celli, but even raises a question whether it is an organism at all. He intimates that "the apparent contractions" of these bodies may be due to contractions of the red contents of the blood-corpuscles. In view of the extensive observations of Councilman and Osler upon malarial blood, this opinion of the Zurich pathologist savors somewhat of undue arrogance. Regarding the development of the organism which is the cause of malarial fevers,—of course the bacillus malariæ,—Klebs believes that this takes place in soil of medium moisture in which there is vegetable decomposition. Saturation, as well as complete drying out of the soil, prevents the development of the malarial organism. He denies that malaria is transmitted in drinking-water, contradicting in this assertion the experience and observation of Dr. Charles Smart, of the United States Army, of whom Professor Klebs appears likewise never to have heard. In fact, throughout his book, which is devoted entirely to the causes of disease, American investigators and observers are deliberately ignored. Whether this is due to ignorance of their work or to an arrogant assumption that it is worthless, the omission of all reference to it is discreditable to the Zurich professor. In the chapters on yellow fever, typhoid fever, diptheria, and pneumonia, the same systematic suppression of the names of American scientists is practised. The names of Flint, Jacobi, Sternberg, Wood, Woodward, and many others who have contributed so much to the general fund of knowledge upon the etiology of infectious diseases, are conspicuous by their absence.

We are sure no American author of standing would be guilty of such a lack of scientific courtesy as Professor Klebs has manifested in the pages of his work. American bacteriologists have for some years labored honestly and to good purpose in the field of pathology. If Professor Klebs is ignorant of the work done here, he is hardly competent to act as a safe guide to the modern student. If, on the other hand, he is familiar with American pathological research, his omission of all reference to it is worse than a confession of ignorance. His choice lies between the two horns of this dilemma.—*Med. Times*, July 23, 1887.

International Criminality. — The Paris correspondent to the *Medical Record* writes: In an article by Dr. Lacassagne, a distinguished medico-legist, on "International Criminality," the author asserts that "criminality is submitted to fixed laws which vary according to the period, the physical and social surroundings, food, heredity, race, etc. The oscillations are neither the work of chance nor of spontaneous caprices; experimental method has scientifically disposed of these utopies on which a hundred generations of meta-

physicians have fruitlessly cavilled." The author further asserts that crimes against persons are in direct ratio, and crimes against property in a inverse ratio, of the elevation of the temperature and of the length of the day. He also demonstrates, by curious graphical sketches, that crimes against morals always attain their maximum in the months of May, June, July, and August. This observation has given birth to a branch of science termed "criminal sociology," which has for its aim the objective study of the criminal world, and the research of causes which engender crime.

M. Lucet, a literary author, writing on the same subject, furnishes very useful information. It comprises eight States: Italy, France, Belgium, Germany, England, Austria, Hungary, and Spain. He divides international crimes into three principal categories: Homicidal. In this class Italy takes the lead, for in 100,000 inhabitants there are 9.53 condemned; then follows Spain, with 8.25; Hungary, with 6.73; Austria, with 2.44; France, with 1.54; Belgium, with 1.44; Germany, with 1.12; England, with 0.71. In the category of wounds Austria is at the head, having 230.96 condemned for 100,000 inhabitants. Belgium comes next, 175.40; Italy, 155.20; Germany, 126.40; France, 64.41; Spain, 23.18; England, 6.83. As regards immoral assaults, Germany and Belgium, according to the author, dispute rather closely the little enviable priority, for the former shows a proportion of 14.07, and the latter 13.87 condemned. France stands next, with 10.26 for 100,000 inhabitants. Then follows Austria, with 9.33; Hungary, 6.89; Italy, 4.01; Great Britain, 1.31; Spain, 1.03. For theft Germany and England take the lead. Germany fornishes 226.08 condemned out of 100.000 inhabitants; Great Britain, 166.62. Of this number Ireland furnished 65.82; England, Scotland, and Wales furnishing the remainder. Information had not been received from Austria on this point; Italy gives 165.89; France, 110.96; Belgium, 90.44; Spain, 59.64; Hungary, 58.56 for 100,000 inhabitants.

That these facts should have an absolute value, it would be necessary to know, in the relative statistics of each nation, the proportion of habitual criminals. According to M. Lucet, the increase of the latter proves nothing in favor of the weakness of the general morality in the midst of a given collective number. He states that one must, on the contrary, conclude that the current perversity accumulates in a sort of purulent collection which serves as a derivative, and lodges itself within the limits of a group of people, that of malefactors by profession, whereas, by a phenomenon analogous to the economical phenomenon of division of work, the remainder of the population becomes refined and improved. It may, however, be deducted, concludes the author, from the irrefutable statistics given above, that "our good friends of London and Berlin will be very wrong for the future to load with contempt and malediction the modern Babylon, as it is called."

Death by Decapitation.—The *Progrès Médical* of July 9th publishes a paper by Drs. Regnard and Loye on the examination of the head and body of a convict immediately after his decapitation by the guillotine. The prisoner was calm to the last, and not pale, even when his neck was fixed ready to receive the fatal knife. Two seconds after decapitation the cheeks were still rosy, the eyes wide open, with moderately dilated pupils, the mouth firmly closed. No fibrillary contractions could be observed. When a finger was placed close to one eye, no change of expression took place; but on touching an eye or the tips of the lashes, during the first five seconds, the lids closed just as in life. This reflex action could not be elicited from the sixth second after decapitation. The jaws were tightly clenched, and could not be opened by manual force; no similar musclar contraction could be detected in the trunk or extremities. One minute after death the face began to turn pale, the trunk remained flaccid, the carotids continuing to throw out blood remaining in the circulatory area.

At the end of four minutes the face was quite pale, the upper lids were half closed the jaws more firmly clenched than before. Irritation of the cut surfaces of the spinal cord failed to produce reflex movements either in the trunk or on the face. For twenty minutes there was no change; then the necropsy was begun. There were signs of old pleurisy and alcholism. The heart beat actively. On opening the pericardium, the ventricles and auricles continued to pulsate for twenty-five minutes; the former then ceased to beat, but the auricles went on for fourty minutes longer. Thus the heart beat for an hour after decapitation. Then its chambers were laid open; the left venticle was firmly contracted, the right relaxed. There was emphysema at the edges of the left lung, as is nearly always observed after death by the guillotine. There were bubbles of air in the vessels of the pia mater, and much air in the subarachnoid space. The knife had passed through the lower part of the fourth cervical vertebra. These researches show that not a trace of consciousness remains two seconds after beheading; that reflex movements of the cornea can be excited for a few seconds; that the heart may beat for an hour, the auricles continuing to pulsate alone for over half that period; and that, putting aside the reflex movements of the eyelid, the contraction of the jaws and the jets of blood from the carotids, it seemed in this case as though a corpse had been decapitated, so inert were the remains of the convict. The entry of air into the inextensible and incompressible cranial cavity, after the excape of blood from its vessels, was only to be expected. Drs. Regnard and Loye note how calm and free even from physiological death-struggle symptoms is death by the guillotine. There is not even asphyxia; death is rather due to inhibition similar to that described by M. Brown-Séquard in animals who succumb to certain irritations of the nervous system. In this country we take on ourselves the responsibility of destroying life judicially. That so grave a task should be done as mercifully as possible is self-evident. Hanging is a very different matter from decapitation. Anglo-Saxon sentiment is against the headsman, but surely a contrivance for a "*mort calme et sans agonie*" might be devised, to replace the ill-favoured gallows.—*British Medical Journal.*

What Shall We Wear?—The *Epoch* of Aug. 5th contains several short contributions on "How to keep Cool and Well in Summer." Dr. Cyrus Edson says that it "is best to wear dark clothing in the summer. The black absorbs the heat when it is in the sun's rays. On the other hand, the heat will pass through the black textures rapidly, so that the radiation of the heat from the body would be much freer in a person clothed in black than white." On the following page Dr. Willard Parker observes: "The best way to dress is to wear thin woollen material next to the skin, as little outside clothing as possible, and that of a light color. Dark colors draw the heat and light ones repel it." This is calculated to confuse the average layman, and he will probably decide to wear the clothes he is now provided with, whatever their color may be.—*Med. Rec.*

A Caution Concerning the Use of Blisters.—J. Comby ("Progr. méd."; "Ctrlbl. f. Kinderh.") reports the case of a child, two years old, which, having been attacked with double broncho-pneumonia in the course of measles, was treated by the application of two large blisters, one of which was kept on for six hours and the other for four. A fortnight afterwards, the surfaces to which they had been applied were occupied by large suppurating and gangrenous sores, and the child died three days subsequently. In the author's opinion, its death was hastened by the blisters, and he adds the general warning that blisters should be used only with the greatest caution in children, especially where from the nature of the disease there is reason to apprehend the supervention of a diphtheritic complication, and never in children's hospitals.—*N. Y. Medical Journal.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, AUGUST 20, 1887.

Editorial.

THE TREATMENT OF UTERINE FIBROID TUMORS BY ELECTRICITY.—In the issue of this JOURNAL of August 13th this subject was considered editorially and the method of treatment inaugurated by Apostoli was described. The great importance of the subject and the unusual interest which it has evoked should be a sufficient apology for a fuller statement of facts bearing upon it. Under the leadership of Apostoli, Woodham Webb and other observers and writers the literature of this subject has become very complete. It only remains for us to cull from various sources such important facts as will enable the reader to obtain a clear knowledge of Apostoli's methods and a few statistics of his results. Fortunately for us Dr. Apostoli has recently prepared a most excellent statement of his methods of procedure and a very concise summary of his results. In a paper read before the British Medical Association, at its meeting in Dublin, on August 2nd, 1887, (*Med. Rec.*, August 13th, 1887.), Dr. Apostoli reviews the work of his predecessors in the electrical treatment of uterine fibroids, and points out the causes which defeated all previous attempts at the successful use of this agent and the various circumstances which have led to its successful employment at his hands. Briefly stated Apostoli's success has been brought about by the adoption of the following methods:

First. He has introduced the galvanometer by which the exact dose of the electrical current is measured and the value of the fluid passed and utilized through the uterine tissues is carefully estimated.

Second. He has made use of high currents which have been progressively carried from 20 to 250 milliampéres, according to the necessities of each individual case.

Third. He has made the use of these high currents not only possible, but easily bearable and innocuous by the use of a new form of electrode, the wetted clay, which renders the cutaneous pole inert and permits a current of great intensity to pass through the tissues to be acted on by the active pole.

Fourth. He employs exclusively the unipolar method by which the galvanochemical cauterization is localized and brought in direct relation with the tumor mass. In the use of this method the positive and negative poles are employed differently according to the effect desired and the conditions observed.

Fifth. The method of Apostoli is scientifically more exact than other methods have been from the fact that the topical effects of the two poles are employed under precise conditions and in accordance with positive indications of their peculiar value in each case. Dr. Apostoli has shown that in electricity we have a double-edged weapon which may be used at discretion to produce local effects quite different in character. The positive pole is hæmostatic in its effect and more or less rapid in its action, whilst the negative pole, on the other hand, is slower and without direct hæmostatic effects.

Considering the dangers of abdominal surgery and the impotency of medication in cases of uterine fibroid, Dr. Apostoli urges his method of treatment on the following grounds.

"1. It is easy of application, since it only requires an elementary acquaintance with the principles and practice of electro-therapeutics.

2. It is simple, for it is ordinarily

nothing more than a skilful, uterine, therapeutical sounding. This is only what may be expected of every surgeon provided with a good galvanometer of intensity, some sort of battery capable of yielding an adequate current of electricity, an inoffensive cutaneous electrode in wet potter's earth, an inattackable intra-uterine electrode in platinum, and a steel trocar for the galvano-punctures.

3. The current is mathematically dosable, so that every operator can carry on the treatment under the same conditions, and adjust the force of the remedy to the nature of the effects to be obtained.

4. The seat of operation is optional, for the surgeon has the power of limiting and defining the point of entrance of the current, making it either the mucous membrane or the tissue of the organ.

5. It is of easy control, and only uses an amount of force which should cause neither shock nor suffering, and ought never be put to use but in progressive and adjusted doses.

6. It is antiseptic in itself, by virtue of the high cauterization of the active pole.

7. It is for the most part easily supported, anæsthetics being only required for certain cases of galvano-puncture.

8. It does not impose upon the patients any forced seclusion, and mostly admits of their continuing the usual habits of life, and even of doing hard work, in the intervals between the operations.

9. But, over and above all these considerations, there is a dominant point to be advanced, which alone is of weight enough to turn the scale in favor of electrical treatment. The simple chemical cauterization, for which you may find the equivalent in the laboratory of the chemist, or in the actual cautery, is not the only matter we have to take account of. This chemical cauterization, so called, is only the first part of the therapeutical scene which gradually unfolds itself.

The electrical current, the power we wield and the accompaniment of every vital manifestation, in its course through the tissues acts prolongedly and profoundly on every molecule, and causes ulterior changes in the tumor structure which may well astonish, both by their extent, safety, and certainty."

Having presented a brief statement of Apostoli's method we may now turn to his results, for it is with these that we should be most interested.

Apostoli asserts that every fibroid submitted to this treatment, sometimes after so short a time as one month, but certainly when the treatment is fully carried out, will undergo a manifest reduction of size. The regression of the tumor, he asserts, is not only apparent during the time of active treatment, but goes on continuously after it has been superseded. Liberation of the tumor from its local attachments takes place simultaneously with the decrease of bulk. The tumor, immovable at the commencement of treatment, becomes more and more changed in its position as the absorption of the enveloping tissues deposited around it advances. Clinically the results, he says, are not less striking, and comprise in ninety-five cases out of one hundred the suppression of all the miseries comprising the fibroidal symptomatology. These are enumerated thus: "Hæmorrhages, the troubles of menstruation, dysmenorrhœa, amenorrhœa, nervous distubances, the direct pains in the growth itself, and from mechanical pressure and the harassing series of reflex action." "In a word," says Apostoli, "the assertion may be safely advanced that, though our therapeutic resources only carry us so far as the sensible reduction of fibroid tumors, and not to their total absorption, we may, with regard to the symptoms, certainly anticipate their complete removal and the establishment of a state of health equivalent to a resurrection." A few figures will show the extent of Apostoli's work. From July, 1882, to July, 1887, Apostoli made in all, 5,201 applications of continuous galvanic currents for most of the maladies included in the gynæcological nosology. These applications were made

upon 403 patient's. Of this number only two died from errors of practice. Of these patients 278 had fibromata or hypertrophy of the uterus, upon whom 4,246 applications of currents of electricity were made.

The lesson to be learned from Apostoli's work is an exceedingly valuable one, and no one can study this work and its results without a high admiration for his skill, earnestness and scientific honesty. The conviction is forced upon us that the agent employed by Apostoli has been subjected to a most thorough and practical test, and we cannot doubt that excellent results will follow the work of others who employ this agent with the same skill and honest care. The one great danger in the popular use of electricity will be found in the tendency to abuse which must surround an agent which can be so readily appropriated by untrained hands and dishonest workers.

We trust that the one important condition which Apostoli has laid down will be carefully considered by all who attempt to employ his method, viz. "It being unconditionally understood, however, that a profound knowledge of gynæcological science must be the indispensable prelude to any attempts."

Reviews, Books and Pamphlets.

Evacuant Medication. By Henry M. Field, M.D., Professor of Therapeutics, Dartmouth Medical College, etc., Philadelphia. P. Blakiston, Son & Co. Pp. 288.

A Practical Treatise on Diseases of the Eye. By Dr. Edward Meyer, Translated by Freeland Fergus, M.B., Philadelphia. P. Blakiston, Son & Co. Pp. 647. Price $4.50.

A Manual of Treatment by Massage. By Joseph Schreibner, M.B., Translated by Walter Mendelson, M.D., Philadelphia. Lea Brothers & Co. Pp. 285.

Massage as a Mode of Treatment. By William Murrell, M.D., F.R.C.P. Third Edition. Philadelphia, P. Blakiston, Son & Co. Pp. 143. Price $1.50.

Ligaments, Their Nature and Morphology. By Jno. Bland Sutton, F.R.C.S., Philadelphia. P. Blakiston, Son & Co. Pp. 107. Price $1.25.

A Treatise on Diphtheria. By A Sanné, Translated from the French by Henry Z. Gill, A.M,, M.D.,L.L.D., St. Louis. J. H. Chambers & Co. Pp. 656.

Syphilis. By Jonathan Hutchinson, F.R.S., L.L.D., Philadelphia. Lea Brothers & Co. Pp. 532.

The Systematic Training of Nursery-Maids. By Samuel S. Adams, A.M., M.D. Reprinted from the *Journal of the American Medical Association*, July 30, 1887. Pp. 11.

Miscellany.

Hysterical Angina Pectoris.—Allied to genuine angina, due to cardiac ischæmia, are quite a number of pseudo-anginal complaints, attributable, some to gastric dyspepsia, others to a well-marked nervous disorganization. The latter class furnished M. le Clerc with a subject for his thesis. The first case of the kind was recorded in 1812 by Millot, but many more have since been observed by Bertrand, Balfour, and others. The affection in this form is met with principally, but not exclusively, in women, generally before middle age. It occurs more rarely at the menopause and in children. The attacks are longer, more frequent, and more severe than in angina of organic origin. They are remarkable by their onset, which is sometimes central, sometimes peripheral. The differential diagnosis is based on the nature and the seat of the pain, and the presence of some sort of aura, by the multiplicity and variability of the irradiations, which are more eccentric and present a greater range. The attacks are often more or less periodical; they occur oftener by night than by day, and are provoked by psychical impressions (emotion, dreams, etc.), seldom or never by a physical effort of any kind. Their termination is marked by phenomena characteristically hysterical in their nature. The past history of the patient is necessarily of importance. The prognosis is favorable, both as regards a fatal termination and as regards a cure. —*London Medical Record.*

Corrosive Sublimate in the Treatment of Diphtheria. — J. Stumpf ('Münchner med. Woch."; "Ctrlbl. f.

Chir.") gives his results in the treatment of thirty-one cases, only two of which proved fatal, in which he used a spray of a solution of from 1 part to 4 parts of corrosive sublimate in 3,400 of distilled water and 600 of peppermint water. About a teaspoonful at a time was applied to the pharynx in the form of a spray, at first every hour, and then every two or three hours. Except a very transitory salivation, no toxic symptoms were observed, but the fever rapidly declined, the diphtheritic process ceased to extend, and the difficulty in swallowing was mitigated. The membrane usually disappeared in from three to five days more. The patients ranged from nine months to twelve years in age, most of them being between three and six years old. In six of the cases the disease accompanied scarlet fever, in five there were marked laryngeal symptoms, and in twenty the phenomena were simply those of pharyngeal diphtheria. —*N. Y. Med. Jour.*

A Mixture for the Lienteric Diarrhœa of Children. — The "Union médicale" attributes the following formula to J. Simon:

Tincture of cinchona . . . 10 parts;
Tincture of rhubarb, } each 4 "
Tincture of calumba, }
Tincture of nux vomica . . 1 part.

From five to ten drops are to be taken before each of the two principal meals, in cold water or in water to which a little wine of cinchona has been added. All the food should be reduced to a pulpy state.—*N. Y. Med. Jour.*

The Treatment of Chronic Eczema of the Vulva in Children.—Apply three times daily a two per cent. solution of carbolic acid to the affected parts.

Once each week touch the diseased surfaces with ordinary acetic acid.

If ulceration occurs and becomes of some depth apply a dressing of

Iodoform (finely powdered) . 1 part.
Alum . . . . . 2 parts.

—*Journal de Médecine*, June 26, 1887. —*Medical News.*

Cocaine in Tonsilitis.—Bœckel has recommended the application of strong solutions of cocaine to inflamed tonsils. He used a ten per cent. solution, applying it at intervals of fifteen minutes. The pain disappeared like magic after the third application, and the anæsthesia lasted an hour. The drug, however, caused a temporary paralysis of the muscles of the soft palate, so that when he attempted to drink, the liquid immediately escaped from the nose. After five hours the abscess ruptured spontaneously, two days earlier than in his previous experience. He recommends the application of a solution (five to ten per cent.) of cocaine at the beginning of an attack of tonsilitis.—*Rev. mens. de Laryngologie, d' Otologie et de Rhinologie*, July 1, 1887.—*Med. and Surg. Rep.*

Hydronaphthol. — Special attention is directed the new advertisement of the Seabury Pharmacal Laboratories (Seabury & Johnson), New York, in this issue setting fourth the claims of Hydronaphthol, the new antiseptic which they offer the Profession. Physicians will please remember that while Hydronaphthol bears a striking resemblance to Beta-naphthol in physical appearance it is entirely different in chemical composition and therapeutic effect; and therefore it is all important that Beta-naphthol be not substituted when Hydronaphthol is ordered or prescribed.

Succus Alterans in Rheumatism and Syphilis.—We are reliably informed that the preparation Succus Alterans (McDade) is becoming a very popular remedy with the profession, and being very extensively prescribed in general practice as an alterative tonic, aside from its use in syphilitic diseases. The good results from its use in the treatment of rheumatism, of chronic character especially, is worthy of consideration. The remedy is certainly growing in favor, and as no great claims have ever been made for it, but simply placed upon its own merit, we think it could possess no higher recommendation.—*Indiana Medical Journal.*

A Simple Method for Applying the Phenyl Hydrazin Test.—Dr. A. K. Bond, of this city, (*Med. News*, August 6, 1887) describes a simple method of applying the phenyl hydrazin test for sugar in the urine, which he learned from Prof. Robert Ultzmann, of Vienna. The value of the phenyl-hydrazin test lies in the fact that by it alone of all tests for sugar, the sugar itself is obtained; a yellow crystalline compound being obtained, which is the result of the union of the grape sugar and the phenyl-hydrazin. These yellow crystals are unlike any other known compound which could be obtained under like circumstances. Dr. Bond describes carefully his experiments with this test. A dry test tube is filled to the height of two-fifths of an inch with the phenyl compound, and an equal number of fine crystals of sodium acetate are added. The urine to be examined is then poured in till the tube is about half full, and after the tube has been heated gently and boiled half a minute, it is set by to cool. In fifteen minutes, if there is over $\frac{1}{15}$ per cent. of sugar present, a yellow sediment appears, which, under the microscope, is seen to consist of bright yellow needles, clustering into sheaf-like forms. When the amount of sugar is less than $\frac{1}{15}$ per cent. the tube must be set aside for a day. He has tested many specimens of pathological urine—clear, cloudy, acid, alkaline, albuminous and containing excess of urates—and has in every case found the crystals when sugar was present. In closing, he states the advantages offered by this test. It is as sensitive as Fehling's, and as easy to make. It is just the test for office use by physicians, and skill in chemistry is not needed for it. No abnormal condition of the urine interferes with it. The crystals once obtained may be kept for weeks for examination. This method may be used for rough *quantitative* determinations.

This test comes in exactly where Fehling's test proves unreliable, namely, in cases where the amount of urine is very small and there is reason to suspect that other substances present are causing the reduction, and in cases where albumen is present. The addition of water, as recommended by Jaksch and Grocco, interferes with the accuracy of the test, and the use of the water-bath is unnecessary. Dr. Bond believes that this test alone is sufficient for office use, and it is hoped that further observation will confirm him in his belief.

Phenyl-hydrazin chloride may be obtained from Eisner & Amend, 205 Third Avenue, New York.

Salix Nigra as a Sexual Sedative.—In many women pain in the ovarian region is a constant attendant upon the menstrual epoch. In some this is due to organic disease, but in a large number it is one of the manifestations of the neurotic temperament. Such cases are met with in all degrees of severity, from a slight amount of discomfort along with indications of globus hystericus, up to hystero-epilepsy in its most pronounced forms.

It has always been a slur upon our profession that when a method of treatment becomes popular or fashionable other methods are entirely discarded. At present, massage and isolation from relatives is the popular mode of treatment, and drugs occupy a secondary place, if indeed, they have any place at all. Pecuniary difficulties, however, stand in the way of isolation or massage ever reaching the masses, the drugs will always be in employment. Several drugs are in daily use against the ailments, but with only partial success; and it is with the view of bringing before the profession a remedy which, in my hands, has produced results which I never had before while I was employing the bromides, valerian, assafœtida, etc., that I have sent this short notice.

Salix nigra, or the pussy willow, is a tree growing from 15 to 20 feet high. It is met with along the streams in the Southern States of America, and is credited with possessing tonic, carminative and stimulant properties, besides being an astringent and antiperiodic. In the *Transactions of the Texas State Medical Association*, Dr. Paine reports many cases treated successfully with the drug. He prescribed it in cases of

ovarian hyperæsthesia, uterine neuralgia, etc., and also in spermatorrhœa and nocturnal pollution. His verdict upon the drug is that it is a powerful sexual sedative, similar in its action to bromide, but without its depressing qualities.

Through Messrs. Thomas Christy & Co., of London, I obtained a supply of the fluid extract, and have been employing it for some months. The most numerous class of cases in which I exhibited the drug were women of nervous temperament, in whom the nervous irritability reaches its height at the menstrual period, when, along with the general *malaise*, is added a very decided pain in one or other ovary. They also suffered from hemicrania, the pain being situated above the left eyebrow, and resembling the feeling as if a nail were being driven into the skull (clavus). Many of them, too, complained of pain underneath the left breast, and extending round to the back. On one or two occasions I have noticed patients complaining of the above symptons, and in only a moderate degree, under favorable conditions—as, for example, long-continued anxiety or alcoholism—go form bad to worse till they become hystero-epileptics. In cases of this kind, it is supposed that the centre of inhibition has in some way got out of gear, and the severity of the symptoms depends upon the amount of disturbance in this nerve-centre.

In cases where the ovarian distress was the symptom for which advice was sought, as being in the patient's eyes the most prominent, I usually succeeded in eliciting other indications of an irritable nervous system, and placed them upon half-drachm doses of the fluid extract of salix nigra three times a day. In quite 75 per cent. of patients so treated a great amount of relief was obtained after two or three days's treatment. Not only was the ovarian hyperæsthesia relieved, but the nervous palpitation of the heart was abated, and the patient felt in every way stronger.

I have also given the drug in two cases of nocturnal emissions with marked benefit. The pollution ceased entirely while the drug was being taken and for several months thereafter. Virile power and passion were not much if at all diminished, but the relief from the ailment gave them great satisfaction.—J. Hutchison, M.D., in the *British Medical Journal*, July 30, 1887.

Obituary

WILLIAM RILEY, M. D.

In the death of Dr. William Riley, the profession of this city loses from its ranks one of its oldest and most highly respected members. Dr. Riley enjoyed remarkably good health up to the hour of his death. Whilst not engaged in active practice for several years past he continued to visit a few of his old patients and less than two hours prior to his death wrote a prescription for one of his patients. He retired to his bedroom at 10 o'clock on Sunday night apparently as well as he had even been. About 12 o'clock a noise was heard in his room, but when his friends reached him he was found dead in bed. His death is attributed to cardiac disease. Dr. Riley was born in this city about 80 years ago. He graduated in medicine from the University of Pennsylvania in 1832. For many years he enjoyed a very large practice, and but few men in this city have labored more earnestly and zealously in professional work.

Dr. Riley possessed a cultivated and well-trained mind, and was a most skilful and successful practitioner. He discharged his professional duties in such a quiet, unobtrusive way that but few of his professional brethren were aware of his skill and attainments. He was a man whose life was singularly blessed in all of its relations. He enjoyed the confidence and esteem of many friends. Up to the last hour of his life he preserved that cheerfulness of manner and gentleness of spirit which endeared him to his friends and patients. He lived a long and useful life and now leaves behind him a record of which his family and friends may feel justly proud. He was eminently a pure and good man as well as a cultured and skilful physician.

Medical Items.

A medical college has recently been organized in Portland, Oregon, in connection with the Oregon State University. A Faculty of thirteen members has been elected.

Deaths from the administration of ether are being announced with increasing frequency. The latest report comes from Philadelphia, the victim being a patient undergoing an operation for hæmorrhoids.

The *Medical Record* states that the rectal injection of "fixed air" was recommended long ago by Priestly as of great utility in putrid diseases, and that Percival in 1768, and McBride in 1776, reported marvellous results from this method in pulmonary phthisis.

Professor Kölliker, of Würzburg, recently celebrated his seventieth birthday and fortieth anniversary of his academic work. He was the recipient of distinguished honors, and the occasion was made by his friends and students a festival of three days' duration.

Signor Ebra, of Milan, prepares an acid hydrochlorate of quinine, which is sent out as an amorphous, yellowish white powder, soluble in one and one-half times its weight of water, and producing little local irritation when used, in saturated solution, for hypodermic injection.—*Medical and Surgical Reporter.*

Dr. Luke H. Blackburn, a well-known physician and an ex-Governer of the State of Kentucky, is now lying dangerously ill at Frankfort, Ky., and his death is expected daily. He is suffering from Bright's disease. Dr. Blackburn has made a notable record in the political annals of his State and at one time enjoyed a wide reputation as a practitioner of medicine.

The Harford County Medical Society met at the residence of Dr. Lee, in Belair, Md., on August 9th, Dr. Pierson Chapman presiding. Papers were read by the President, Dr. Pierson Chapman and Dr. J. E. Michael, of Baltimore. The subject of dysentery was discussed by a number of gentlemen present, including Dr. John Morris, of Baltimore. This disease is now quite prevalent in Harford county. The meeting was largely attended and was of a very interesting and instructive character.

The local Committee of Arrangements in charge of the Ninth International Medical Congress announces that the widespread desire to attend the Congress is such that the amount of money for the reception and entertainment heretofore deemed sufficient, will be entirely inadequate to provide for the large number that will be in attendance. The Committee appeals to the medical profession throughout the country for additional subscriptions to the entertainment fund. As a large number of foreign members will attend the Committee relies upon the liberality and hospitality of the American profession for the means to make the social features of the Congress commensurate with its dignity and importance.

Since the erection of the Brookly Bridge, a number of individuals have intentionally jumped from it into the river below, but, on August 1st, a young man who was assisting some workmen engaged in painting the ironwork accidentally fell from the bridge. He struck the water, one hundred and twenty feet below, chest-first, and though he was unconscious when rescued, he soon recovered his senses under appropriate treatment. He was taken to the Chambers Street Hospital, where it was ascertained that he had received a fracture of the sternum, but beyond this and one or two slight bruises, he was apparently uninjured. According to the last accounts, he was doing perfectly well.—*Boston Medical and Surgical Journal.*

Dr. N. Senn writes in *Journal of American Medical Association*: I visited the gynecological and obstetrical wards in charge of Professor Leopold, and was promised a laparotomy for next day. I was asked to come perfectly aseptic, which request I carried out conscientiously, including bath, shampooning, etc.; but was informed next morning that inasmuch as the city was celebrating the King's birthday, the operation would be postponed. As Dr. Stelzer performed his vaginal hysterectomy an hour later it could not have been considered a crime in Dresden to peform a surgical operation on such an eventful day, and I made up mind that a surgeon who postpones on such flimsy grounds cannot be troubled with many operations during the year; consequently I did not wait to test the reliability of the second promise, but lost no time in transporting the aseptic *ego* to a more profitable place.

Increase of Blindness in the United States.—In a paper read before the Convention for the Advancement of Science, in session in New York during the present week, Dr. Lucien Howe, of Buffalo, N. Y., presented statistics to show that while the population of this country during the ten years from 1870 to 1880 had increased at the rate of 30 per cent., blindness during the same period of time had increased 140 per cent. He estimated the cost of sustaining an army of over 50,000 blind on the lowest basis of cost and wages which would have been earned by those who can work at over $16,000.000 in 1880 or over $25,000,000 in 1887.

The cause of this increase of blindness was attributed in great measure to contagion. Immigration was considered an important factor in view of the large number of contagious diseases of the eyes introduced every year into this country from abroad. Dr. Howe states that statistics show that blindness has increased in an almost constant ratio from North to South and that it decreases in the same way from East to West.

Original Articles.

PRACTICAL NOTES ON THE TREATMENT OF SKIN DISEASES.

Hypertrophies of the Epidermal and Papillary Layers.

BY GEORGE H. ROHÉ, M.D.,

Professor of Hygiene and Clinical Dermatology, in the College of Physicians and Surgeons.

(*Continued from last issue.*)

PIGMENTARY NÆVUS.

It is difficult to give an exact anatomical description of nævus. Sometimes the blemish consists merely of an excess of pigment, when the spot may be looked upon simply as an exceptionally dark freckle. In most cases, however, there is likewise hypertrophy of the entire epithelial and papillary layers, sometimes even involving the deeper strata of the corium. Demiéville has shown that the pigment is mostly accumulated along the course of the finer blood-vessels, indicating that the coloring matter is derived from the blood.

Nævi may be flat, or elevated above the surrounding normal skin. Their surface is smooth or irregular, and is often thickly planted with hairs. They vary in size from a pinhead or smaller to large, irregular patches which cover the greater surface of the body. The latter are often very hairy and mixed with fibroid or lipomatous growths, as in a remarkable case illustrated in the volume on skin diseases in Von Ziemssen's cyclopedia.

Some observers think that nævi are more frequently distributed upon the face than on other regions of the body, but this is probably an error. Physicians in general practice have occasion to see these deformities upon the chest, abdomen, and extremities in cases where the face is entirely free of them. The greater apparent frequency of nævi upon the face is doubtless due to the more favorable opportunities for observation of these growths upon a portion of the body constantly exposed to view.

A curious variety of nævus is that first described by Arndt in 1830, and afterward more thoroughly studied by Von Bärensprung, Theodore Simon, O. Simon and Neumann. In this form the pigmented and papillary hypertrophies follow the distribution of one or more branches of the cerebro-spinal nerves. Sometimes there is also vascular hypertrophy, as in vascular nævus. Bärensprung first suggested the dependence of these malformations upon disease of the spinal ganglia *in utero*. These cases are not very frequent.

Nævi are usually considered as mere blemishes, only demanding removal when they cause annoyance by their size or the disfigurement they produce. But in exceptional cases, especially if subjected to persistent irritation, they may undergo malignant degeneration. I have seen four cases in which a pigmented mole was the starting point of an epithelioma. One case occurred in an elderly maiden lady who had attempted the destruction of a mole upon the forehead by the application of nitrate of silver. The persistent irritation produced resulted in the development of a rodent ulcer, which was successfully treated by scraping and thorough cauterisation. In another case a warty mole, situated near the tip of the nose became rapidly cancerous, resulting in the formation of a tumor as large as a medium-sized pear. Microscopic examination proved the correctness of the clinical diagnosis of epithelial cancer. This tumor was removed by the means of the thermo-cautery. In a paper read before the American Dermatological Association last year, Dr. Sherwell, of Brooklyn, also directed attention to the danger of malignant degenerations. Schwimmer has observed the degeneration of moles into melanotic sarcoma.

The very rare and curious affection described under the names of "atrophia cutis," "xeroderma of Hebra," and "angioma pigmentosum et atrophicum," may be referred to in this place. Dr. R. W. Taylor, of New York, has studied the disease most thoroughly in a series of cases, and Drs. J. C. White, of Boston, and Duhring, of Philadelphia, have

added observations of their own. There appear to be several varieties or stages of the disease. Dermatologists are not yet in unison as to the course of the affection, but it seems well established that malignant (epitheliomatous) degeneration is a frequent termination. The manifestations of the disease are somewhat complex. There is, according to Dr. Taylor, at first excessive vascular development resulting in the formation of minute, bright-red spots, followed by pigmentation and atrophy. Dr. White considers the melanotic process to be the primary and typical one, and that the atrophy of the skin and vascular development are secondary and non-essential.

The causes of pigmentary nævi are entirely unknown. In the majority of cases, they are unquestionably hereditary. It is probable that in many of the cases in which direct heredity cannot be shown there is indirect inheritance.

In view of the rather frequent malignant degeneration of pigmented nævi, it is certainly good practice to remove them if situated in a locality subjected to irritation. Every nævus may, without exaggeration, be looked upon as a potentially malignant growth.

The methods of removal are excision, cauterization and electrolysis. When the growth is small the latter method will give the most satisfactory result, as the scar which remains is smooth, soft, and non-contractile. The thermo-cautery may also be used, but will give less satisfaction than electrolysis.

Acid nitrate of mercury, and nitric acid are the best caustics. Their action can be limited, and they leave smooth and pliable scars.

Where the nævus is large, and disfiguring, it may be excised with the knife, and if necessary a plastic operation performed to supply the deficiency of skin. The operation should be done as early in life as practicable, as the growth enlarges with the increase in size of the features.

(*To be continued.*)

PRACTICAL NOTES ON DISEASES OF THE RECTUM.

BY S. T. EARLE, M.D.,

Professor of Rectal Surgery in Baltimore Polyclinic and Post-Graduate Medical College.

(*Continued from last issue.*)

EXAMINATION OF PATIENTS.

When a patient presents himself complaining of any rectal trouble, unless you can thoroughly satisfy yourself by his replies to your questions that it is trivial in character, insist on an examination, especially if it has lasted for more than several days. We think patients are frequently driven to seek relief from those outside the ranks of our profession, because those in it are so generally in the habit of treating their complaints so lightly and dismissing them with a prescription for an ointment and laxative medicine; never shrink from examination if there is the slighest indication for it. But before proceeding with the manner of making both a digital and speculum examination, a word or two with regard to the questions to be asked that will elicit the most information, will be in place. Inquire if there is any pain in or around the rectum, if so its character; whether continuous or intermittent; if it precedes, accompanies,or follows defecation; whether sharp and lancinating, or dull, aching with a disposition to bear down. The character of the discharges, whether they are molded, and if so, their size and shape; if they contain anything besides fæcal matter, if so its character and espeicially its oder. Whether or if not there is any protrusion of the parts with the act of defecation and its extent, if it bleeds, is attended with pain, if it returns itself after the completion of the act, or has to be returned by the patient. Is the patient constipated, and if so its extent; or does he have diarrhœa. These questions with such others of a similar character which may suggest

themselves to the practitioner will throw much light upon the nature of the case. When an examination has been decided upon the position to be chosen first suggests itself; this varies with different practitioners; some prefer a patient to kneel on a chair and bend over its back; others the knee-elbow position, on the floor, bed, or table; but I think the most convenient for all ordinary cases, as well as that entailing the least unnecessary exposure of the person, is to place the patient in the left lateral position of Sims, except that the thighs should be more flexed upon the trunk, with the hips slightly elevated, and the top of the table should be on a level with the operator's shoulders. When you wish to examine still higher up the bowel than possible in this position you can gain an additional inch or two for the examination with the finger, by making the patient stand erect and open his limbs laterally. The next step in the operation is the examination of the anus, and its surroundings externally; look carefully for fistulous openings, which are sometimes so very minute as to escape quite a carful inspection. I have on several occasions overlooked them after a special search, and only subsequently discovered them by a minute drop of thin pus that exuded. Observe the condition of the anus, whether puckered and drawn well up, or patulous; the former condition while not pathognomonic, suggest the existence of an ulcer, or fissure in close proximity to the anus. Next look for growths around the anus, and then feel for indurations, which may exist without giving other evidences of their presence. Before proceeding with an internal examination give a warm water enema, which might however be done before the patient has been placed upon the table; this has the effect of not only bringing away fæcal matter that may have collected in the rectum, but also of bringing down internal hæmorrhoids if any exist. You are now ready to proceed with the examination of the rectum, which should be first done with the finger; this in many cases will be all that is necessary after the finger has become perfectly familiar with the normal condition of the parts, except to examine the anus and the inferior portion of the rectum for fissures and small hæmorrhoids with the narrow speculum of which I shall have occasion to speak more fully presently, and the use of which is not attended with any pain. The index finger should be used after having first pared the nail very closely and anointed the finger well. After having examined the rectum thoroughly with the finger if you detect nothing abnormal, and if the symptoms do not indicate that you have overlooked anything, you can then proceed to examine the anus for fissures, which are likely to escape detection with the means previously used. This is best done by an anal speculum, which is little more than a retractor; it is known as the gorget speculum, and consists of a single concave blade of nickle-plated metal about six inches long, with a handle set on at an angle of 45°; the blade is small and pointed so that it may be very easily introduced, and is less painful than the introduction of the finger. With this instrument the space between the two sphincters, and indeed just within the internal sphincter, can be examined very satisfactorily. Should your digital examination of the rectum not have been sufficient you can then call to your assistance one of the many rectal speculums now in use; of these I have found most satisfactory the one devised and recommended by Dr. Kelsey, (see his his work on Diseases of the Rectum.) Before proceeding to use the speculum, it is generally better, in order to make a thorough examination, to dilate the sphincters thoroughly, but this is only practicable where an anæsthetic has been used. I have, however, frequently used the speculum quite satisfactorily without having to resort either to dilatation, or to giving an anæsthetic, but only in cases where there is not much irritability, and where a very thorough examination is not necessary. To dilate the sphincters it is best to proceed slowly and only use the fingers, introducing first one, then two, and finally the four drawn together in the shape of a cone;

when the four have been introduced and have been allowed to remain until the sphincters have become patulous, which will require a good deal kneading and about five minutes time, you are then ready for the speculum. Should you want to carry your examination still farther up the bowel, as is the case where a stricture, or a growth is located in the sigmoid flexure, the dilatation can be extended to the point of admitting the hand and fore-arm, if small; such a procedure should only be resorted to in urgent cases, and with great care, especially when the diseased point is reached, for fear of rupturing the bowel. It is also far more satisfactory if the patient be a woman whose roomy pelvis allows of sufficient manipulation to be of considerable service. Before resorting to this last procedure for the diagnosis of a stricture high up in the rectum, or sigmoid flexure, you should use a rectal bougie. It should be very flexible and made of soft rubber to avoid injury to the bowel, which is very likely to occur if a hard, stiff instrument is used as formerly. Of those at your disposal to select from I would recommend those invented by Dr. Wales and called by his name. They come in 12 sizes and are very flexible. In the use of this instrument great care is needed lest the examiner mistake one of the normal folds of the mucous membrane, by which the end of the bougie is likely to be obstructed, for a stricture. The existence of a stricture should not be positively diagnosed on such evidence, unless indeed after repeated examinations with it, the obstruction should always be found at the same distance from the anus.

(*To be continued.*)

The following was prescribed, at a recent clinic for epileptiform seizures, due to some coarse lesion in the brains occurring in a child 13 years old:

℞.—Hydrag. chloridi corrosiv., gr. $\frac{1}{30}$
Ext. ergotæ (aquos), gr. ij.
Ft. pil.

Sig.—Morning and evening.—*Col. and Clin. Record.*

PRACTICAL NOTES UPON SURGICAL SUBJECTS.

BY RANDOLPH WINSLOW, A.M., M.D.,

Professor of Surgery in the Woman's Medical College of Baltimore; Lecturer on Clinical Surgery University of Maryland.

ULCERS AND SORES*.

It is scarcely necessary to attempt a scientific definition of the term ulcer. We all know what an ulcer is, and know also how intractable it may become, continuing in many cases months and years, until the bearer of it becomes an object of disgust to himself and to those with whom he is brought in contact. For practical purposes it is sufficient to state that an ulcer is a wounded surface which refuses to heal (Billroth), and this open surface may have come into existence in a great many different ways. Much confusion in regard to this subject has arisen from the attempts of authors to create a too elaborate classification in which minor differences in the external appearances of the sore are made to assume the dignity of distinct varieties. If we bear in mind the fact that most every ulcer is brought into existence by a preceding inflammation, we will naturally classify the ulcerative process in accordance with the precedent inflammation, into acute and chronic (Gross); but as some ulcers depend upon local causes entirely, and others upon constitutional dyscrasiæ, we must further recognize, idiopathic or local, and constitutional, or symptomatic, ulceration. Besides these great divisions into which this subject falls naturally and easily there are other distinctions which it is of the utmost importance to bear in mind, as they have a direct bearing upon the treatment. The most important of these distinctions are those which depend upon the condition of the granulations which are found upon the base of the sore: Are the granulations exuberant, or are they defective? We have then ulcers in which the new growth is excessive, and those in which it is either

*In this paper the terms ulcer and sore are used synomously.

entirely absent, or markedly abortive and the treatment which is applicable to the one, is improper for the other.

In regard to the etiology of ulcers, it must be borne in mind that whatever tends to produce an alteration in the normal circulation of a part is capable of producing an ulceration, and these disturbing factors may be either local or constitutional. Amongst the local causes of ulcers are injuries of various kinds, burns and diseased conditions of the blood vessels, whilst any constitutional disease may be a predisposing cause, as syphilis, tuberculosis, gout and anæmia.

Ulcers may be formed by the breaking down of the tissues from within outwards, as from the pressure of an abscess, or the ulcerative action may begin upon the surface and gradually extend in depth. The whole thickness of the skin may be destroyed and the underlying tissues be invaded, but in very many cases where the sore appears to be of considerable depth, this is due rather to the infiltration of the edges, than to the actual destruction of the skin.

Ulcers spread either by a molecular disintegration of the surrounding tissues or by the formation of sloughs, in the latter case forming what is known as a sloughing ulcer; in either instance the the destructive process continues until tissues are reached, which are sufficiently healthy to interpose a barrier to its further progress. Now, in favorable cases the process of repair begins, the face of the ulcer assumes a new aspect, the shreds of dead tissue are exfoliated, and florid granulations spring up from the base of the sore, and by gradual accretion the level of the edges is reached; cicatrization can now be effected, though it is not absolutely essential that the granulations should reach the level of the skin. The first indication of the formation of a cicatrix is the appearance of a faint whitish or bluish line around the circumference of the wound, which increases slowly day by day. At first the cicatrization progresses much faster than it does later on, as the ability to cicatrize is much lessened the nearer the new skin approaches the centre. Sir Astley Cooper in his surgical lectures calls attention to the fact that a round sore heals much more slowly than a long one, but this depends manifestly more upon the size of the ulceration than upon its shape.

It has been said that cicatrization cannot occur except from the circumference towards the centre, but this is an error. I have a number of times seen islands of cutification spring up in the middle of the sore, and become centres of healing, as actively and as effectively as if skin grafting had been employed. This fact can be explained either by the supposition that minute portions of skin have been left, or that at least the epithelial ducts of the sebaceous and sweat glands have not been destroyed, or by the supposition that epithelial scales have fallen upon the sore and have grown in their new home and formed centres of cutification. The cicatrix is not skin, but is at best only an indifferent substitute for it. At first it is very vascular and of a reddish color, but gradually contraction takes place, the new tissues lose their vascularity and and become abnormally contracted, the capillaries are crowded out, and the scar becomes white and rigid. This contraction may lead to unpleasant results, if the ulceration happens to be in the flexure of a joint, or upon the face or neck. When an ulcerated surface assumes a florid appearance from the springing up of granulations, it is spoken of by many authors as a healthy ulcer, which is rather a misnomer, as no ulcer can be considered healthy; a better term would be "healing ulcer." Ulcers are usually found upon those portions of the body which are but poorly supplied with arterial blood, and in regions where stasis of venous blood is liable to occur, hence we find a large proportion of cutaneous ulcers upon the lower extremities, where the conditions are especially favorable for their development. In size they vary from minute points to that of a silver dollar, or they may be elongated and narrow; strange to say the size of the sore does not materially affect the

amount of pain which is experienced, some large sores remaining almost or quite painless, whilst others very much smaller in size cause intolerable suffering. The discharge from an ulcer may be profuse and purulent, or sanious, or serous, depending upon the character of the sore; and in some chronic cases, the face of the ulcer becomes red and glazed, looking like raw meat, and little or no discharge takes place. It is upon the state of the granulations that the greatest stress is laid; if the granulations are florid, small, set close together and covered with a creamy pus they are said to be healthy and a sore which presents these characteristics is said to be a healthy sore. From this condition we have variations in each direction as has been stated; the granulations may be too exuberant, larger than normal and rising so high above the edges of the ulcer that cicatrization cannot occur; this indicates too great a formative power, and it must be repressed; in other cases the granulations project above the level of the sore, but they are pale and œdematous; in others they are absent entirely or are abortive, and require to be stimulated before healing will result; but we will speak of these conditions and their treatment when the different classes of ulcers are taken up for consideration. If we take the healthy or healing ulcer as a type, we will be able to appreciate the departure from the normal order, for all sores and open wounds must conform to this type before healing can occur, whatever the cause or nature of the sore may be.

THE HEALTHY OR HEALING ULCER.

As has been stated all sores and gaping wounds must become healthy before a cure can result. If the ulcerative process is still in progress it must be arrested; if sloughs and shreds of necrotic tissue are still attached to the ulcer, they must be removed by nature or by art; if the granulations are too luxuriant they must be repressed, if too indolent they must be stimulated; whatever the condition that presents itself, the object of the surgeon is to secure the development of granulations upon the base of the chasm. A granulation is a loop of capillaries surrounded by leucocytes, and it is by means of these granulations that chasms of all kind are repaired. In the healthy, healing, ulcer the granulations are small, bright red, closely aggregated, but slightly sensitive, and bleed freely upon rough handling. By gradual accretion, the granulations reach the level of the skin, and then a whitish or bluish line is seen to start at the circumference where it is in contact with the skin, becoming redder where it fades into the granulating tissue; this is the new line of cicatrization, which gradually extends from the circumference towards the centre. As there is more reparative material deposited than can be used in the repair the breach, it is thrown off in the shape of a creamy pus, though this is not absolutely necessary, as when the surface of the sore is disinfected and treated antiseptically no pus may be formed. This course is not always followed; sometimes a buff colored membrane covers the face of the sore, apparently consisting of fibrinous material, which is gradually raised to the level of the skin by the underlying granulations and cicatrization takes place by the spreading of the cicatrix into this membranous covering. In such cases I have seen independent centres of cutification spring up in the midst of this membranous deposit, but whether from the accidental deposit of epithelial scales upon it, or from the remains of epithelial elements from the hair follicles or sweat glands I do not know. When an ulcer has put on the appearance described above, but little treatment is necessary, the main solicitude being to prevent any disturbing agency from gaining access to it. Usually the mildest and most soothing applications are to be employed, thus, the surface of the sore may be covered with some bland unguent, as oxide of zinc ʒi, vaseline ʒi, or iodoform may be used in the place of the zinc, in the same proportions, or in powder, though it has seemed to me that this drug has a tendency to make

the granulations too exuberant; or Goulard's cerate, especially where it is desirable to restrict the reparative action somewhat. One of the best applications for a healing sore is the carbolized linseed oil, 1 part of acid to 20 or 30 of the oil. In fact it is not profitable to enumerate the various applications which may be employed safely and satisfactorily; every physician has his own favorite prescriptions for such cases and any simple bland agent will answer. This so-called healthy ulcer is not deserving of classification as a distinct variety of sore; it is not a variety, but a condition which all surfaces that heal by granulation must pass throught; it is convenient, however, to introduce it somewhat prominently so that departures from the normal may be the more readily described and understood.

(*To be continued.*)

THE GENESIS AND APPLICATION OF HYDRIODIC ACID.

BY WILLARD H. MORSE, M.D.,
WESTFIELD, N. J.

If there is such a thing as romance in drugs the history of hydriodic acid has been decidedly romantic. Half a century after its recognition as a non-metallic element, iodine entered into marital relations with hydrogen, and this gaseous acid was brought forth. Dr. Andrew Buchanan, of Glasgow, was the introducer, his theory being that it is by passing into this form that iodine, when taken internally, is absorbed, and enters the circulation. He considered it capable of producing all of the peculiar systemic effects of that element, and that in a manner less unpleasant to the palate, and less offensive to the stomach. He made use of an extemporized formula, consisting of the dissolution of 330 grains of potassium iodide and 264 of tartaric acid, each in twelve drachms of water, mixing the solutions, filtering off the bitartrate of potassium, and adding sufficient distilled water to make a solution of 50 fluid drachms. Obviously each fluid drachm of this preparation has to contain five grains of iodine.

With the same spirit that possessed some Americans to make so-called improvements on the tincture of cinchona, the citrate of iron, and sundry other pharmaceutical products, there were those who changed the formula of Buchanan, and entered the changed preparation for the United States Pharmacopœia. Its admission followed in 1860. The process of the officinal formula consisted in passing sulphuretted hydrogen through water in which iodine was suspended. The result was a colorless gas, with a sp. gr. of 1112, and a strong affinity for water. It contained ten grains of iodine to each fluid drachm, and was therefore twice as strong as Dr. Buchanan's solution. This, on its face, seemed legitimate, but it was not long in proving disappointing for several reasons, the principal having to do with its ready decomposition. To obviate this latter propensity, Mr. John A. Dunn, of Brooklyn, in 1869, proposed to modify the Buchanan formula to secure the requisite advantage at the expense of the conformity with the officinal strength. This amounted to a regeneration of the drug, but it did not become equivalent to a legitimation, and in the following year it was dimissed from the pharmacopœia, without account taken of its regeneration, and because of the errors of its earlier Americanized days. Subsequently there was a marked backsliding, or possibly a proving that the regenerative effect was pretended rather than real. Suffice that the condition of "innocuous disuetude" set in, and few medical men made use of the excommunicated acid.

Mr. Dunn had published his proposition for modification in the *American Journal of Pharmacy*, for Jan., 1869. In Chester, S. C., the village physician, Dr. Wylie, took up the idea to improve on it. Dunn prepared the acid by mixing 209.75 grains of iodide of potassium with 190.25 of tartaric acid, and dissolving each in three fluid drachms of water. Dr. Wylie mixed 60 grains of the iodide with 90 of the tartaric acid, dissolving it in four fluid ounces of

water. The only difficulty was that which beset Dr. Buchanan,—the simple solution quickly decomposed and set the iodine free. There is no record of any attempt of Dunn to correct a failing which he himself had failed to correct in Buchanan; but Wylie did just what the wise country doctor is in the habit of doing in order to preserve decomposable drugs. He mixed with his acid a very heavy syrup, and used it with great success. In 1872, his son, Dr. W. Gill Wylie, had reason to remark his father's substitute for the iodide, and with that perspicuity which has since distinguished him as gynæcologist, and especially as laparotomist, he took a careful study of the pharmacal relations of the preparation. He reasoned it out in this way: "Gaseous hydriodic acid (H. I.) is rapidly and perfectly absorbed by water, but being held by a feeble chemical affinity, the hydrogen soon becomes disengaged, and sets free a corresponding amount of iodine, which, being soluble in hydriodic acid passes into solution, colors it red, and renders it too irritating for internal use. As 100 parts of hydriodic acid consist of 99.72 parts of iodine and 78 parts of hydrogen, it will be seen that it is nearly all iodine, and when not decomposed it is entirely non-irritant and pleasantly acid to the taste. To make the syrup requires care, and most drug-shops will get up sufficient decomposition in the mixing to render the solution useless." This reasoning was acted upon by R. W. Gardner, of New York, who succeeded in making a syrup containing 40 minims of the dilute acid to the ounce, representing 6.66 grs. of iodine (correspondent to 8.69 grs. of potass. iod.) and keeping perfectly. This was in 1878, and the reputation which hydriodic acid has attained during the past nine years has been won by this syrup. There are, it is true, numerous imitations weak in iodine and in therapeutical effects, and with the ready propensity for decomposition.

A remedial agent with such a unique history deserves to be of value and popularity, and such indeed is the measure of its therapeutical application, considered in a legitimate light. I do not think it any exaggeration to say that it not only produces the peculiar alterative effects of iodine, but it is given as a perfect substitute wherever the iodide of potassium is applicable, without provoking iodism.

Its effects are marked in the treatment of asthma and bronchitis. It is recommended in gout, useful in chorea, and efficacious in malarial disorders. For rheumatism, both chronic and subacute, we have no better remedy. In the various forms of syphilis, I care not to prescribe the iodide with the syrup at my hand. Its use in lead and mercurial poisoning, and in eczema, is attended with marked success. Indeed, there are few disease in which it has not been used, and with the conclusion that it certainly produces all of the constitutional effect of iodine, due allowance being made, of course, for the variable effects on the system, arising rather from idiosyncrasies than from the quality of the medicine itself.

Abstracts and Extracts.

Report of the Seybert Commission.—The preliminary report of the Commission appointed by the University of Pennsylvania to investigate modern spiritualism, in accordance with the bequest of the late Henry Seybert, has lately been published. It will be remembered that Mr. Seybert, who, during his lifetime, was known as an ardent defender of modern spiritualism, left a bequest to the University of Pennsylvania to found a chair of philosophy in that University, and to the gift added a condition that the University should appoint a Commission to investigate the claims of modern spiritualism. A Commission of ten men was accordingly appointed, and it is safe to say that ten better names could hardly have been chosen. The medical profession is represented on the Commission by William Pepper, Joseph Leidy, George Koenig, James W. White, Calvin Knerr, and S. Weir Mitchell; Dr. Pepper, as Provost of the University, being Chairman, and George S. Fullerton, Secretary.

The Commission has spent several years in investigating phenomena appearing under the mediumship of the best exponents of modern spiritualism, whose services they could command at any reasonable price. Among these was the noted Henry Slade, whose performances in Germany, several years ago, so befooled Zoellner and three of his associates, Weber, Fechner, and Scheibner, and were the basis of a book subsequently published by Zoellner, which has had a very wide circulation, and is much cited by believers in spiritualism.

The American investigators, after putting these mediums to severe tests (in which, however, with due fairness, they were careful to comply with the usual "conditions,") and having matched Slade's performances with those of certain prestigiators (as the juggler, Kellar), and to the advantage of the latter, conclude that, as far as their studies and researches, now extending over more than three years, are concerned, the mediums have failed to make good their claims to anything more than consummate fraud and deception. In conclusion, they say: "We beg to express our regret that thus far we have not been cheered in our investigations by a single novel fact; but, undeterred by this discouragement, we trust to continue them with what thoroughness our future opportunities may allow, and with minds as sincerely and honestly open as heretofore to conviction."

In an appendix, are given full details of the interview of one of the members of the Commission with Professors Fechner, Scheibner, and Weber, the surviving colleagues of Professor Zoellner in his experiments with Dr. Henry Slade. There would seem to be evidence that Zoellner was of unsound mind at the time of those experiments; that Fechner was old and feeble and partially blind, and relied upon Zoellner's observations; that Scheibner was also affected with imperfect vision, and not entirely satisfied in his own mind as to the phenomena; and that Weber was advanced in age, and did not even recognize the disabilities of his associates. "No one of these men had ever had experiences of this sort before, nor was any one of them acquainted with the ordinary possibilities of deception."

There is also an interesting account of an investigation of the power of mediums to answer the questions contained in sealed envelopes, the result of which goes to show that these mediums are not too honest to resort to such tricks of opening and reading sealed letters as renderfamous that arch humbug of the days of Marcus Aurelius, Alexander, of Abonotichus, whose clever deceptions are recorded by Lucian. The marvels of "Materialization Séances" are made sufficiently ridiculous in the report of Rev. Horace Howard Furness, with which the book ends. On the whole, we should think that this little volume would be anything but pleasant reading to many who have committed themselves to this superstition; that it will have a wholesome, helpful effect on many others, we do not doubt.—*Boston Medical and Surgical Journal.*

Use of Creosote in Pulmonary Tuberculosis.—Oscar Fräntzel has lately advocated the use of creosote, not indeed as a specific against tuberculosis, but yet as a valuable remedy. The following is a report of an address of his given in the *Deutsche Med. Wochenscrift*. Fifty years ago creosote already was used in phthisis, but probably in far too small doses. In 1877 Bouchard and Gimbert again recommended it highly. Since 1878 Fräntzel has used it in cases where there was little or no fever, only slight cough irritation, and in the absence of complications. He gives the following prescription: creosoti, 13.5; tinct. gentian., 30.0; spirit. vini rectificatiss., 250.0; vini xer., q. s. ad col. 1000.0. The nurse gives a tablespoonful two or three times a day in a wine-glass of water, or in some cases undiluted. The patients are placed in a bright sunny room separate from bad cases, with thorough ventilation day and night, the room being well warmed. The patients, being warmly clothed and shod, are sent into the open air as much as possible, and have a cold sponge and rub down every morning. If very thin, they have

at most two tablespoonfuls of cod-liver oil a day. But that it is not the care and diet that effects an improvement, Fräntzel has proved to his own satisfaction. If this treatment is begun in autumn, the patients are generally desirous of returning to their work the following Easter. Since 1877 he has had but three patients during the summer whom he could treat in this way. As a rule he keeps the patients a week or a fortnight without giving creosote, to determine whether their cases are suitable for this treatment. During this time he has them weighed once or twice and examined for tubercle-bacilli. If there is much, or constant slighter fever, creosote cannot be expected to be of any use, nor if there be any quantity of tubercle-bacilli. The first sign of improvement is an improved appetite, followed by decrease in the amount of expectoration, and gradual disappearance of cough, dyspnœa, and pain. The patient begins to look fresher, the panniculus becomes stronger, and there is an increase in weight of at least 3 to 5 lbs. in a few months, and often 20 to 30 lbs. If there is no appreciable increase in weight in the first four weeks, the patient will derive no benefit from the creosote treatment. But when an improvement takes place, the results are striking. There is an appearance of freshness and good spirits in the patients, and on examination it is generally found that the limits of dullness in the lungs are restricted, and particularly the rhonchus disappears. On the other hand the number of bacilli in the sputum remains unchanged, but the sputum itself gradually grows less, till it altogether ceases. However, the number of such favorable cases is comparatively very small. In nine years there have been, on an average, in this hospital, 400 consumptive patients, and of these, about 15 have in each year been so far benefited by the treatment, as to be able to go to work, and in many cases to remain cured. Yet Fräntzel asserts that creosote is more successful than any other medicine. Many patients come to the hospital several years in succession to undergo the creosote treatment, and for a number of years are able to return to work in the spring.

Only in those cases in which there was a one-sided affection with large cavity formation, did the retraction of the lung seem to be beneficially influenced by creosote. Sometimes the use of creosote has to be abandoned, because it produces vomiting, cardialgia, loss of appetite, or diarrhœa. In his private practice, Fränkel has found this method to be less satisfactory. Nine cases were highly successful. Seven of these were slight cases, and were completely cured. In the other two were considerable cavities in the one lung, while the other lung was free. He pleads for a fair trial of the method, in good time, before the disease has advanced too far.—*The London Medical Record.*

Sulphur Fumes in Phthisis.—The *Gazette des Hôpitaux* of May 26th, publishes an interesting communication from Dr. Sollaud, of the French navy, on the beneficial effects of a sulphurous atmosphere in pulmonary phthisis. Typhoid fever prevailed in an endemo-epidemic form among the troops at Cherbourg, and it became necessary to disinfect two large barracks occupied by the marine infantry. Part of the operation consisted in burning large quantities of sulphur in each of the dormitories, all orifices being hermatically closed up. After thirty-six hours, a sergeant and a couple of soldiers proceeded to open the doors and windows; this had to be done rapidly, for the air of the room was thoroughly saturated with sulphurous fumes. The whole operation of fumigating, etc., the different rooms occupied sixty days, and Dr. Sollaud entrusted the duty to a sergeant who had returned from services in the colonies, suffering from a severe attack of anæmia. He had, besides, several times had considerable hæmoptysis, and had been, since his return, repeatedly sent to hospital. His symptoms were emaciation, night-sweating, diarrhœa, want of appetite, fever, dyspnœa, persistent pain between the shoulders, frequent cough, expectoration of opaque nummular sputa, dulness

on the left side extending backwards, crepitant *râles* and cavernous breathing, with occasional hæmoptysis. The sputa contained large quantities of Koch's tubercle bacilli. The right side was also attacked, but to a less degree than the left. Slight improvement having taken place, and the man wishing to return to duty, Dr. Sollaud entrusted him with the above-mentioned easy work, in order to test the effect of a sulphurous atmosphere on his lungs. At first he complained of the suffocating action of the sulphurous acid. The oppression was greater; he had a hacking cough, accompanied by an acrid, burning sensation in the throat, extending down the windpipe; expectoration was more abundant and more painful than before. On persevering, however, the painful symptoms gradually disappeared, and sergeant was able to move about without inconvenience in the densest sulphurous atmosphere, and soon began to derive much benefit from the treatment. After six weeks the pains in the chest had diminished, and the cough had almost disappeared. The sputa had become whitish, aërated, and came away easily without causing vomiting. The number of bacilli had considerably diminished. Diarrhœa and evening rise of temperature had disappeared; the patient breathed more freely, his appetite was good, his strength and weight increased, and the night sweats were less profuse. The percussion note was normal over the whole of the left side, and there was slight dulness in the right sub-clavicular fossa. On auscultation the breath-sounds were slightly bellows-like on the left side behind; there was prolonged expiration on the right anteriorly and small crepitant dry *râles* behind on the same side.—*Brit. Med. Jour.*

A Simple Way to Apply Fluids to the Nasal Cavity.—Dr. Charles W. Dulles, of Philadelphia, describes the following in the *Medical and Surgical Reporter*, (August 6th, 1887): In practice it is somtimes far from easy to make application of fluids to the inside of the nose and posterior nares. Douches are not quite safe, because the fluids are sometimes forced into the Eustachian tube, and set up an inflammation of the middle ear. On the other hand, it is very hard to teach patients how to draw a fluid up into the nose without producing strangling or coughing.

A way which I have found very successful is the following: Take a test tube about four inches long and half an inch wide, and place in it the solution to be used. Open the mouth and breath through it. Put the open end of the tube into one nostril, catching the rim against the ala so as to make a good fit.

Then bend the head back, and raise the closed end of the tube, so as to *pour* the fluid into the nostril. All the while keep breathing through the mouth. The fluid will now run into the nose, pass back to go the naso-pharynx, and can be made to go around behind the septum and on top of the soft palate, and come out of the opposite nostril. By moving the head about in various directions, the fluid can be made to reach any point in the nares, in front or behind, and to remain in contact with it as long as may be desired.

Any one who will try it will be surprised to find how thoroughly and easily this can be done.

Of course, all fluid applications to the nares must be well warmed and of a proper specific gravity. If, for example, Dobell's Solution be warmed to about 100° (Fahr.), and used in this way, it will be found a most soothing application. The quantity to be used may easily be as much as such a test tube as I have referred to will contain. And it may be filled several times and used again and again at a single sitting.

The method just described may not be new to others, but it is new to me; and I publish it for the benefit of those who are not acquainted with it.

Note on the Use of Antipyrin in Thermic Fever. — Morris J. Lewis, M.D., of Philadelphia, says in the *Medical and Surgical Reporter*, Aug. 6th, 1887: In antipyrin we possess a very valuable addition to our means of treating thermic fever. This should be

given hypodermatically in simple solution, as follows:

℞.—Antipyrin 3ij.
Aq. dest. q.s. ad. f 3ss.
M.

♏ xx of this solution contains about gr. x of antipyrin; and this amount, or in severe cases double the quantity should be injected beneath the skin as soon as it is possible to do so. This solution should be kept on hand during the heated term by all those who may be likely to be called upon to treat heat-stroke, for by the timely administration of this drug lives may be saved that otherwise would be lost; for much time is often lost in conveying the patient to a place of safety. This applies especially to patients before they are taken to the hospitals.

A very small vial may be carried in the pocket with the syringe, holding a sufficient quantity for any emergency.

Compressed tablets of 5 or 10 grains could easily be prepared, and readily dissolved in a few moments in water.

The hypodermic use of this drug is far preferable to its internal use, even if the patient should be able to swallow, or to its use by injection into the bowel as reported by Dr. Orville Horwitz, (Transactions of the College of Physicians, 1885), on account of the greater certainty of its speedy action. The possible danger of collapse after its free use should be borne in mind, but the immediate great danger of the hyperpyrexia far out-weighs this possibility.

As soon as possible the treatment by the bath, wet pack or rubbing with ice, should be employed, as it will not do to trust to antipyrin alone; although sub sequent injections should be given should the temperature not show signs of falling, or should there be a decided rise after the temperature has been reduced by other means. This drug should be considered as a most valuable adjuvant to the ordinary treatment to be mainly relied upon.

Antifebrin can not be used in this way on account of its insolubility.

Statistics of Melanotic Tumors.—In the *Archiv für Klinische Medicin* (vol. 35, No. 2), Dr. Ph. Dieterich gives a statistical comparison of 145 cases of melanotic growth, 114 of which were operated on. Seventy-four of the patients were males, 59 females; in 12 cases the sex is not stated. The age varied very much, as is shown in the following table:

0—10	5
11—20	2
21—30	15
31—40	20
41—50	20
51—60	29
61—70	23
71—80	2
Of unknown age	20

The youngest patient was six months old, the oldest 75 years and nine months.

Thus, though no time of life is free of the disease, yet mature age is most exposed to its attacks. As regards etiology, in 37 cases the disease took its beginning from a mole or a wart; in one case it was caused by a blister, which produced moist eczema. The growth was on the head in 28 cases, in the neck in 11, on the trunk in 41, on the extremities in 48; in one case the site of the disease is not specified. The average duration of the disease to time of operation was two years and a half; the shortest being a month and the longest twenty years. Of 33 cases operated on there was no record. Of the remaining 81, 53 died; 15 were still living, but the disease had recurred; only 13 remained quite well. The date of recurrence varied from two days to fifteen months. Of these 13 cases 8 were still doubtful, because fifteen months had not yet elapsed since the operation, and recurrence was still to be feared. Thus the number of established cures was reduced to 5. It was proved, however, that operation might produce lasting benefit, 1 patient having been free from recurrence for twelve years. In cases not subjected to operation, the duration of the disease from the beginning until the death of the patient was on the average fifteen months; while in cases that

were operated on, the corresponding interval was 33 months. It would, however, be a mistake to conclude from this that the operation prolonged life to that extent, as the cases in which an operation was impossible or inadvisable were, as might be supposed, more severe in themselves, or presented special features of difficulty owing to the disease being situated in important organs, such as the liver. On the whole, operation was advisable, as it offered the only chance, infinitesimal though it was, of saving life.—*Brit. Med. Jour.*

ANTIFEBRIN v. ANTIPYRIN.—Many of comparatively small points of difference between the mode of action of various drugs, which yet make one a therapeutic success while the other is a failure, can only be learnt by direct experiment on the human subject, and when a physician will experiment on himself, the result of his observations are often peculiarly valuable. The American physician, Dr. G. Walter Barr, has recently made some comparative experiments on himself with antifebrin and antipyrin. He was suffering from malaria, and his temperature sometimes rose to 105° F. With antipyrin he found that the temperature began to fall in a little over half an hour; the minimum was reached in two hours; the greatest fall never exceeded 3°, nor fell much short of this, but it was only maintained for a short time, temperature beginning to rise again in half hour or more. With antifebrin the temperature did not begin to fall for an hour or an hour and a half, but it was reduced 4°, or to the normal, and did not again begin to rise for six hours. Toleration was quickly established with both drugs, so that the dose had to be raised—for antipyrin from 10 to 23 grains, and for antifebrin from 5 to 13 grains. Antipyrin was followed by a feeling of great *malaise*, while with antifebrin there were no after-effects. Antipyrin caused diaphoresis, and slightly slowed the pulse; antifebrin caused diuresis, and slowed and strengthened the pulse. Dr. Barr naturally prefers antifebrin because the dose is smaller, the effect on the temperature more powerful and more permanent, and the influence on the heart tonic, while there are no unpleasant after-effects. The only objection is its comparatively slow action.—*British Medical Journal.*

Reviews, Books and Pamphlets.

Evacuant Medication. By HENRY M. FIELD, M.D., Professor of Therapeutics, Dartmouth Medical College, etc. Philadelphia: P. Blakiston, Son & Co. Pp. 288.

We so often give medicines from which we get no very appreciable result, that it is always a matter of satisfaction to tell a patient that "this pill will produce such an effect." No one preparation has even given the uniform gratifying results, in dispensary practice, as the C. C. Pill. With that class of patients and, indeed often with the better class, the fact that a medicine has produced a decided effect is an evidence to them that something is being done for them. In the book before us Dr. Field has given the results of careful study, and accurate experiments with two very important and somewhat neglected classes of drugs, cathartics and emetics. The various individual substances are discussed and the therapeutic indications concisely arranged. It is a deplorable fact that physicians use evacuant medication so carelessly as they do, prescribing somebody's pill, or some purgative water with very little regard to the composition of the preparation, or the special needs of the patient.

Dr. Field's book is very readable, and what is more, instructive to a greater degree than is usual with the modern works on Therapeutics, as it is sufficiently scientific and sensibly practical.

A Practical Treatise on Diseases of the Eye. By DR. EDWARD MEYER, Prof. L' Ecole Pratique de la Faculte de Médecine de Paris, etc. Translated from the third French edition by Freeland Fergus, M.D., Ophthal mic Surgeon, Glasgow Royal Infirmary, etc. Philadelphia: P. Blakiston, Son & Co. Pp. 647. Price $4.50.

While books on special subjects, as the one before us, are of necessity of chief interest to those who pursue the subject treated of, in a special manner, this particular book will be very useful to the general practitioner, since it gives all the latest work in opthalmology, and deals with many affections which the physician is called upon to treat.

A Manual of Treatment by Massage and Methodical Exercise. By JOSEPH SCHREIBER, M.D., formerly Docent in the University of Vienna, etc. Translated by Walter Mendelson, M.D. Philadelphia: Lea Bros. & Co. Pp. 285.

The author deseribes clearly the various methods he employs in this useful and fashionable plan of treatment, and the book contains a number of very good illustrations.

Ligaments, Their Nature and Morphology. By JOHN BLAND SUTTON, F.R.C.S., Lecturer on Comparative Anatomy, etc., Middlesex Hospital, England. Philadelphia: P. Blakiston, Son & Co. Pp. 107. Price $1.25.

This little monograph on the very important subject of ligaments, will be of practical interests to surgeons and anatomists.

The book is very tastefully gotten up and well illustrated.

BOOKS AND PAMPHLETS RECEIVED.

Sixth Annual Announcement of the Woman's Medical College of Baltimore. Session 1887-88. Baltimore, Prof. R. H. Thomas, Dean.

Eighty-First Annual Circular of the University of Maryland School of Medicine. Session 1887-88. Baltimore. Professor J. Edwin Michael, Dean.

Annual Announcement of the College of Physicians and Surgeons of Baltimore. Session 1887-88. Baltimore. Prof. Thomas Opie, Dean.

Fifth Annual Announcement of Philadelphia Polyclinic. Session 1887-88. L. W. Steinbach, M.D., Secretary.

Thirty-Ninth Annual Announcement of the Medical Department of the University of Georgetown. Session 1887-88. Washington, D. C. J. W. H. Lovejoy, M.D., Dean.

Third Annual Report of The Home for Incurables of Baltimore City. W. H. Perot, President.

Ninth Annual Report of the Presbyterian Eye, Ear, and Throat Charity Hospital of Baltimore, Md. Julian J. Chisolm, M.D., Surgeon in Charge.

Seventh Annual Report of Dispensary for Nervous Diseases, Baltimore Md. John Van Bibber, M.D., Physician in Charge.

Fifth Annual Report of the Baltimore Eye, Ear and Throat Charity Hospital. George Wm. Brown, President.

On Some Important Points in the Treatment of Deep Urethral Stricture. By F. N. OTIS, M.D., of New York. Reprint, Pp. 10. D. Appleton & Co., New York, 1887.

Insanity in the Colored Race. By J. D. Roberts, M.D., Goldsboro, N. C. Reprint, pp. 12. Argus Jacob Print, Goldsboro, N. C.

Perineal Urethrotomy. Report of Nine Cases of Perineal Section of the Urethra Without a Guide. By J. EDWIN MICHAEL, M.A., M.D. Professor of Anatomy and Clinical Surgery, University of Maryland. Reprint from *Annals of Surgery*, July, 1887. Pp. 14. J. H. Chambers & Co., St. Louis, Mo.

Division of the Cervix Backwards in Some Forms of Anteflexion of the Uterus with Dysmenorrhœa and Sterility. By H. P. C. WILSON, M.D., of Baltimore. Reprint from volume XI Gynæcological Transactions. Pp. 13.

Some Observations Upon the Modern Treatment of Urethritis. By GEORGE R. BREWER, M.D., of New York. Reprint pp. 23. Wm. Wood & Co., New York, 1887.

Oration Delivered by Request Before the Medical and Surgical Society of Baltimore, Md. Commemorate of Dr. August Frederick Erich. By THOMAS B. EVANS, M.D. Pp. 15. Isaac Friedenwald Press, Baltimore, 1887.

Elephantiasis Arabum of the External Genitals in a Negress. By WILLIAM E. MOSELEY, M.D., and ROBERT B. MORISON, M.D., of Baltimore. Reprint, pp. 7, 1887.

The Irritable Heart and the Depressed Heart. By HENRY SALZER, M.D., of Baltimore. Reprint, pp. 22, 1887.

Post-Graduate Instruction in Gynæcology. By HENRY C. COE, M.D., M.R.C.S. Reprint, pp. 12, 1887.

Medicine and Medicine-Men, Anniversary Address Delivered at the Banquet of the Louisville Medical Society, May 26, 1887. By JOHN GODFREY, Surgeon M.H.S. Pp. 34, Louisville, Ky., J. P. Morton & Co., Printers, 1887.

Announcement of the Medico-Chirurgical College of Philadelphia. Session 1887-88. William F. Waugh, M.D., Secretary.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, AUGUST 27, 1887.

Editorial.

THE THERAPEUTICS OF BOOKS.—Of late, many articles have been written and many addresses delivered on the important subject of medical education, and the necessity of a thorough preliminary training has been much insisted upon. The drift of it all is that a college course better fits one for the professional studies that follow, and while this is, to a certain extent, true, there is a side issue which is by no means unimportant. No observer of human nature needs to be told or even reminded of the influence exerted by mental conditions on pathological processes. The microscopist may not be able to find on the specimen examined the result of a mental perturbation, but the clinician notes it every day. To all the real suffering in the world is added fully as much which is almost solely imaginary. How often do we see a patient with a lugubrious expression, and listen to the pitiful plaints of many pains and aches until suddenly something interests the hypochondriacal imagination when *presto*, the scene shifts and the agony is forgotten. He is a wise physician who studies these effects, who knows how to run his fingers deftly over the keys until the right note is struck. Such men are rare, unfortunately, and their gift is one that is inborn, though to a degree it may be cultivated, and to use the same simile, his ear may not tell him accurately when the right note is sounded, but his previous education will. If he has read history, biography, travels; if he has dipped here and there into the great ocean of literature; if he has made some exertion to remember striking incidents, he will be furnished with a supply of remedies which will often stand him in good stead. Of more importance still, this wise physician of whom we are speaking, will be able to prescribe *books*, in a thoroughly scientific manner. Not to say to a patient who is languishing for some mental occupation, and in consequence lavishing all attention on the bodily ill, "*Read something*," he might almost as well say in some cases "*Take something.*" Not to say "Here is a list of the hundred best books" or "Get a book from the circulating library." This is the sort of prescribing that therapeutists have been fighting with all their might and main. To the skillful practitioner, the therapeutic indication is his guide, and so to a modest degree, are certain books indicated in certain cases. When a patient says "I don't care for reading" it means in many instances that he has never read anything that interested him, or in other words that his proper note has never been struck. Of course the cases have to be selected. First the sort of patient, and this restricts our medication somewhat; a certain, though limited amount of education is prerequisite, yet one will often be surprised to find with what interest a laboring man will read Shakespeare for example. An instance comes to mind, in which an intelligent colored woman was delighted with a copy of the great master that fell into her hands. At this point great skill is required of the physician; he must diagnose roughly the taste and capacity of the patient, and not prescribe the *Inferno* t.i.d. where *Robinson Crusoe* or *Ivanhoe* should be taken *ad. lib.*

The second point to be observed is to suit the medicine to the particular stage of the disease.

It may be that the tonic effect of history is called for, or the soothing influence of poetry, or the active stimulation of a thrilling novel, or the nutritive

qualities of essay or biography. Thus can we change the current of thought from a morbid, introspective channel to a healthy wide reaching one; thus can we "minister to a mind diseased." Almost can we bring the Alpine breezes for a few minutes into sick room, or inspire the sufferer with fresh courage by some grand example, and though we may not be able to

"* * * cloy the hungry edge of appetite
By bare imagination of a feast."

we may sometimes whet the 'edge of appetite' by making the mouth water over some description drawn by a skillful hand.

Does our patient want company, companionship? who cannot find it to a greater or less degree in books?

As Emerson says: "A company of the wisest and wittiest men that could be picked out of all civil countries have set in best order the results of their learning and wisdom" and we have them, as much or as little of them as we want. We rarely appreciate, having them in such rich profusion as we do, the absolute power of books; we do not realize that a book may change a man's whole life, and the writer quoted above says in another place "I find certain books vital and spermatic, not leaving the reader what he was; he shuts the book a richer man." Thus we see there is a powerful influence to be exerted by a book, an influence which in certain states and conditions can be made to do great good, a something that cannot be obtained from the apothecary shop, and herein lies one of the reason why a physician should be a reading man.

Miscellany.

Dangers of Antipyrin.—Dr. Alex. H. Weir, of Staunton, Va., writes to the *Medical News:* A few days since I prescribed antipyrin in seven grain doses in the form of capsules to a lady in good general health suffering from nervous headache, the ordinary remedies having failed to relieve her. She took the first dose, and reported to me that in a short time, within five minutes, it had such a distressing effect on her that she said she feared she would die. Roaring in head, watery and suffused eyes, burning sensations about the neck and face, and what was the most alarming symptom, great uneasiness in the præcordial region, a feeling of constriction and inability to breathe, were the conditions noted. The effects gradually wore off and the headache was relieved. A few days afterward a second capsule containing seven grains was taken for the same purpose and with the same results, only more intensified, as she reported.

Some days ago I saw the lady, and telling me that she was suffering from a headache, I gave her, much against her will, one-half of the seven grain capsule, making grains iiiss. It was but a few moments until all the unpleasant symptoms above described were seen: suffused eyes, roaring in ears, with burning sensation over neck and face, and the most marked evidence of cardiac depression and embarrassed respiration. The pulse being so feeble and frequent, and the other signs of collapse so marked, I felt the urgency of stimulating, which was accordingly done. Gradually these effects wore off, the last of the unpleasant symptoms to disappear being the constriction in the præcordial region. While recognizing antipyrin to be a valuable addition to the list of our new remedies, we cannot be too cautious in its use. I can but think that the dose ordinarily advised is too large.

Bronze Memorial of Dr. Ambler.—There is now displayed in the Navy Department a large artistic bronze tablet in a handsome frame, bearing the inscription, "The medical officers of the Navy, in memory of Doctor Ambler's noble example and heroic death, have prepared this tablet." The tablet bears an excellent likeness in relief of Dr. Ambler, above a scene representing the departure of Noros and Ninderman from the camp in the Lena Delta, while the surgeon sustains De Long's wasted figure. On the tablet is the inscription, "James Markham Ambler, M.D., United States Navy, Lena Delta, October 9, 1881. Duty stronger than love of life."

Dilatation of the Right Ventricle, and its Exploratory Puncture.—Prof. Schrötter describes in the *Med. Jahrbücher* (Vienna), 1887, Heft, I, and *London Medical Record* June 15, a case of the above mentioned lesion treated by exploratory puncture. The patient, a girl, aged 14, had always suffered from severe palpitation and breathlessness, and presented the following signs. The face and extremities were very cyanotic; the cervical vein showed distinct systolic pulsations. Right side of the thorax in front projects more than left. Respiration, 26. Apex-beat of heart not visible anywhere, but palpable in the left sixth intercostal space, just outside the nipple line. The cardiac dulness began just internal to the apex-beat, and reached horizontally across the lower end of the sternum to the right nipple-line. On the left side it extended upwards to the lower border of the fourth rib, half way between the nipple and sternal lines; on the right side it reached as high as the lower edge of the third rib, and at the level of the fourth rib reached outwards almost to the nipple-line, whilst a little lower it became continuous with the mammary line as far as the sixth rib. On auscultation, a double murmur was heard at the heart's apex, less distinct at the base, where the second pulmonary sound was accentuated.

On auscultation, vesicular breathing on both sides, with medium crepitations, and a few rhonchi. There were evidently mitral insufficiency and stenosis, together with tricuspid insufficiency. But how was the peculiar form of the cardiac dulness to be explained? Was it due to a pericardial or to a circumscribed pleuritic exudation, or to extreme distension of the right ventricles? As the cyanosis and dyspnœa increased, an exploratory puncture was made with the needle of a Parvaz's syringe. Pure blood escaped, as was expected. (Professor Schrötter has already advocated the puncture of aortic aneurysms in certain cases—*see* Ueber Therapie der Aorten aneurysmen, *Deutsche Archiv. für Klin. Med.*, 1884, Band vi.—and was convinced that the operation was not dangerous.). The operation had no appreciable effect upon the patient, who died nearly three weeks afterwards. The autopsy made by Professor Kundrat showed that the right ventricle was enormously distended. The right lung presented adhesions at the edge and outer surface of the upper and middle lobes. This accounted for the fact that inspiration had made no difference in the cardiac dulness, and also for the peculiar shape of the latter. The valvular lesions were found to exist as diagnosed. No trace of the exploratory puncture could be seen.—*Boston Medical and Surgical Journal.*

Treatment of Furunculosis.—According to Dr. Palasne, of Champeaux, the use of the iodide of iron favors the resolution of furuncles, hastens maturation when they are already present, and even prevents their appearance. It acts as a microbicide, being eliminated by the glands of the skin and destroying the pathogenic microbe of the affection. He usually prescribes Blanchard's pill of the iodide of iron two to four a day (that is to say 10 to 20 centigrammes of the iodide of iron), and he continues their administration for at least eight days after the last furuncle has disappeared. As the iodide of iron is a very unstable compound, we may have to recourse to the following process: Take in a glass of water a teaspoonful of preparation No. 1: Powdered sugar, 40 grammes, iodized alcohol, 40 drops (mix rapidly, and put into a well-corked bottle). Then take immediately a packet of No. 2: Iron by hydrogen, 8 centigrammes, sugar q. s. Without reflecting in any way upon the results published by Palasne, we desire to inform our readers that we have had no personal experience at all as regards the efficacy of this method. The remedies which in our hands have been of the greatest value in cases of furunculosis have been: 1, internally, the sulphides, and agents directed towards the general condition of the body. 2, locally, care of the skin, lotions of camphorated alcohol and aqueous sublimate solutions, and finally, applications of red plaster or emplastrum de vigo.—*Journ. Cutan. and Gen.-Urin. Dis.*, August, 1887.

Spirit of Ether as a Corrigent of Opium.—Dr. A. G. Auld ("Lancet") remarks that there are few drugs more commonly prescribed than opium, and none more abused or carelessly combined. None of the official preparations are quite destitute of the disagreeable after-action of the pure drug—that of causing headache, nausea, and loss of appetite—due to its diminishing intestinal secretion. Atropine, while to a certain extent it antagonizes the action of opium or the central nervous system, rather adds to its effect on the alimentary secretions. The author has observed good results from giving opium in conjunction with ether, which, he says, is one of the most powerful stimulants of secretion that we know of. He generally prescribes equal parts of tincture of opium and spirit of ether. [We presume the authors refers to the spiritus ætheris of the United States and British Pharmacopœias. Concerning the spiritus ætheris *compositus* (Hoffman's anodyne), the authors of the United States Dispensatory says: "This preparation is on many occasions a useful adjunct to laudanum to prevent the nausea which is excited by the latter in certain habits."] —*N. Y. Medical Journal.*

Mushroom Poisoning.—M. Pruvost has recorded a case of intestinal hæmorrhage after eating mushrooms. The patient, a woman aged 49, had up to August 23rd enjoyed good health. On that morning she ate an omelette with mushrooms, and in the afternoon was seized with pains in the stomach and abdomen. The pain continued all night, becoming much worse on the following morning. Six days later, when M. Pruvost was called in, she complained of great pain in the neighborhood of the navel. In spite of a dose of caster-oil, her bowels had not been opened for eight days. There was no fever, but the tongue was slightly furred. A saline purgative was administered, which produced a copious evacuation having a very fœtid smell. For the first time since the accident the patient was free from pain for three or four hours. A second purge on the following morning produced a black stinking stool, less abundant than the first. On the morning of September 5th the patient for the first time vomited bile, and during the afternoon blood. Hæmatemesis continued during the night and the following day, in spite of the usual remedies. On September 6th, towards evening, bloody stools appeared, and continued at short intervals until 10 P.M., when death occurred, fourteen days after the first appearance of the symptoms.

M. Pruvost attributes the fact that the patient alone, among the persons who partook of the mushrooms, was poisoned to a predisposition of the digestive organs, rendering them more susceptible to certain kinds of indigestible food.—*British Medical Journal.*

Molline.—Under the name of mol line Dr. Kirsten highly extols an excipient which appears to be simply a kind of soap. It is obtained by cold saponification with liquid caustic potash, mixed with a small quantity of soda suds; 30 per cent. of glycerine is then carefully poured into this warm. Molline is of a soft consistence, which varies but slightly in any temperature, and may be kept a long time. It is of a yellowish-white colour; its reaction is neutral. Dr. Kirsten considers it to be a good therapeutical excipient in diseases of the skin; mercurial molline, in the same proportions as Neapolitan ointment, is easily prepared and very active. As an excipient for preparations of styrax, liquid pitch, salicylic, carbonic, and tannic acids, white and red precipitates, chrysarobin, ichthyol, sulphur, thymol, molline may be recommended to dermatologists.—*Brit. Med. Jour.*

Milk and Phthisis.—In a paper read at a recent meeting of the Yorkshire Association of Medical Officers of Health by Dr. Mason (Hull) he expressed the opinion that milk which had been obtained from cows affected with tuberculosis would convey consumption if supplied to human beings. The President said it was very important that tuberculosis should be included in the list of contagious diseases by the Privy Council, as

consumption, which in his opinion was preventable, destroyed more people in a year than all the other contagious diseases put together.—*Brit. Med. Jour.*

Inebriety and Inebriate Hospitals in America.—Dr. T. D. Crothers, Hartford, Connecticut, Secretary of the American Association for the Cure of Inebriety, recently read a paper before the International Congress of Inebriety. He showed that the movement originated in 1809, when Dr. Benjamin Rush, of Philadelphia, in his *Medical Inquiries*, declared "that intemperance was a disease, and that hospitals for its exclusive treatment should be established in all the principal cities in the land." Similar views have been urged at different times in the past, from Ulpian the Roman jurist, in the century of the Christian era. Dr. J. E. Turner, of Maine, in 1854, organized the first inebriate hospital in the world. In 1864 a magnificent building was completed and opened for patients at Binghampton, N. Y., the pioneer hospital of the world, which finally was changed into a chronic insane asylum. Over fifty different hospitals for inebriates have been established in America. More than thirty of this number are in successful operation; the others have changed into insane asylums, water-cures, etc. Not less than 2,000 inebriates are under treatment in hospitals in America. They represent most largely the incurable cases; but probably 35 per cent. of all who remain under treatment one year or more are permanently restored. In Connecticut the best laws are in force, giving power over inebriates to voluntarily commit themselves, or be committed by their friends, without the formality of appearing before a judge or court. In other States they are comitted to asylums in about the same way as the insane are. Most of the inebriate hospitals in America are private and corporate organisations, which receive from time to time State aid. Some of them have endowments, such as free beds or incomes from estates, or are given so much of the licence money. Others depend upon the income from patients, private donations, and charities generally. In 1870 the American Association for the cure of Inebriates was formed. Its papers and *Transactions* comprise the first permanent literature on this subject.

Inebriety in Austria.—Chevalier Max Proskowetz de Proskow Marstorff states that in Austria inebriety is increasing everywhere on a dangerous scale. The consumption of alcohol (taken as at 10 per cent.) was 6.7 litres a head in a population of 39,000,000; but in some districts 15½ litres was the average (4½ litres go to a gallon). In all Austro-Hungary there was an increase of nearly 4,000,000 florins in the cost of alcohol in 1884-85 over 1883-84. In 1885 there were 195,665 different places (stations, gin-shops, and subordinate retails) where liquors were sold. Dr. Julius Wolff had shown that the proportion of liquor-stations to the inhabitants varied from 1 for every 173 to 1 for 1,181. In districts where the most spirits are used there were fewer fit recruits. The Austrian Inebriety Society was founded on January 17th, 1884, and has done good work by collecting statistics, publishing pamphlets and proceedings, chemically examining spirits, and promoting tea-cars and coffee-rooms.

The Law of the Determination of the Sexes.—"So many laws, founded upon insufficient data, have been advanced lately as determining the sex of the child that we are led to give our own, which has been deducted after the compilation and careful examination of a vast quantity of statistics. If the mother, while pregnant, sees a bow-legged flea with a wart on its left knee, the child will be a male. If the wart is on the right knee, a female. In case the flea is cross-eyed and lacks its eye-teeth, these indications are reversed."—*St. Louis Weekly Medical Review.*

The American Academy of Medicine will hold its annual meeting at Columbia College, Washington, D. C., beginning at noon on Saturday, September 3rd. A collation will be served at the Arlington Hotel on the same evening.

Medical Items.

The University of Dublin has created the degree of Bachelor of Obstetrics.

One of the best things about Mr. Lawson Tait is that he declines to "talk shop" at dinner.

One hundred and sixty-five people died in Chicago, July 15, 16, and 17, from the effects of heat.

A printer up in Canada is said to be 103 years old. He has made so many typographical errors during his career that he is afraid to die.—*Exchange.*

Dr. N. A. Randolph, a well-known physician of Philadelphia, and one of the editors the *Medical and Surgical Reporter*, was drowned at Atlantic City on August 21st.

Itching Piles.—The intolerable itching of external piles is said to be relieved by the application of a lotion composed of turpentine, 2 parts, spirits of camphor and colorless tincture of iodine, of each 3 parts.

The Medical and Surgical Reporter states that a lotion of weak carbolic acid, sponged over the body once or twice daily, affords an efficient means of protecting children against the bites of gnats and other small insects.

The British Medical Association now numbers close on to 12,000 members. Its surplus balance over last year's expenses amouted to about $20,000. The Association has now $100,000 invested in property. It is the largest and most influential medical organization in the world.

The Association of American Medical Editors will give a banquet to distingushed Medical Editors from abroad on Monday, September 5th, 1887, at 10 o'clock P. M., at Riggs House, Washington, D. C. The affair promises to be one of the most attractive features of the Congress.

Prof. Koenig has had an extensive experience with cases of carcinoma of the rectum, and has come to the conclusion that when the disease has extended high up it is better not to resort to desperate measures with a view to its removal, but prefers now, in such cases, to make an inguinal colotomy by dividing the bowel completely, emptying and closing the distal end and stitching the proximal end into the wound. This operation affords great relief, prolongs life, and is preferable to the more doubtful results obtainable by extirpation of a high rectal cancer. I believe Koenig only echoes the sentiments of all prudent and conscientious surgeons on this subject. There is a limit to radical measures in this well as in malignant effections of other organs. Dr. N. Senn in the *Journal of American Medical Association.*

Dr. Whittaker on the Specialists.—It is a lamentable fact that the least work was done by the specialists, there having been notable exceptions, but the fact remains. Sessions, whose subjects have been confined to specialists in medicine, have often been characterized by the absence of the men in our city who present themselves to the profession and the people as especially qualified in these matters. The profession views with suspicion a specialist who does not show sufficient interest in his department to attend the medical society on such occasions. Such specialists are like Thompson's Razors, intended only for the trade. It is a question if the general practitioner is justified in turning over to these specialists any of his cases.—*Address before the Cincinnati Academy of Medicine.—Lancet-Clinic.*

In the *Gazette des Hôpetaux*, M. Blondel publishes a note on iron as an adjuvant in certain cases of dyspepsia. As it is admitted that dyspepsia produces anæmia, it seems natural that iron should be added to the various medicinal substances employed in the treatment of indigestion. The great difficulty of absorbing this drug is overcome, M. Blondel thinks, by the employment of albuminate of iron. Being combined with a proteid substance, the iron is, so to speak, already partly digested, and its absorption therefore becomes easy. Moreover, this combination of iron and albumen seems well suited to correct the alteration of the blood, which is characterised by a decrease in quantity of its albumen. M. Blondel administers this medicament in the form of *liquer de Laparade*, in which the albuminate of iron is mixed with the syrup of orange, which is itself useful in relieving atony of the stomach. The dose is one tablespoonful (five centigrammes of the metal in a state to be assimilated) after each meal.—*Brit. Med. Jour.*

The Paris correspondent writes to the *N. Y. Medical Journal*: "Can a physician raise his fees without giving notice to his patients? In one of the law courts here this question has been answered in the negative. A physician had attended a lady in her confinement some five years ago, and charged $20 as his fee. Afterwards he was called upon to attend the same lady in confinement, and this time he charged $40. The lady refused to pay, and suit was brought to recover. The doctor claimed that his standing and skill had much improved, and that he was warranted in charging more for his time. The defendent replied that she had expected to pay what she had paid before. The decision of the court was that there was always a sort of implied agreement between doctors and patient, on the basis of previous charges, and that this convention fixed the subsequent rates; consequently, as the doctor could not allege any special difficulties or unusual loss of time in the case, and had not given his patient notice of his intention to raise his fees, he must lose the case and pay costs, the court awarding him only his former fee.

Original Articles.

PRACTICAL NOTES ON MEDICAL SUBJECTS.

BY GEORGE J. PRESTON, M.D.,

Professor of Practice of Medicine in Baltimore Polyclinic and Post-Graduate Medical College.

I.—The Treatment of Valvular Disease of the Heart.

The significance of the term *heart disease*, or *valvular disease*, has of late years become very much restricted. When auscultation came to be taught systematically, and the use of the stethoscope became general the error crept in of regarding every murmur that was heard over the heart as diagnostic of disease of the valves. This was the result of an illogical deduction for, although disease of the valves nearly always manifests its presence by a murmur, the converse, that a murmur is invariably an indication of valvular disease is by no means true. This fact has been proved beyond any controversy by many series of collected cases, and notably by the list recently compiled by Sir Andrew Clarke.

Throwing aside, then, those cases in which the murmur is the only sign, our attention is directed to indisputable disease of the valves, evidenced by the well known symptoms which such disease occasions. It is not the intention to discuss at this time the symptomology of cardiac affections, and it is sufficient to state that the symptoms upon which we must rely are, a murmur associated with change in the heart's size, either hypertrophy or dilatation, irregularity and insufficiency in its action, and the consequent congestion of various organs, lungs, liver, spleen, kidneys.

The morbid process affecting the leaflets of the valves brings about two conditions, stenosis, and incompetency.

In stenosis the aperature is reduced allowing less blood to pass, at each contraction, into the aorta, where there is stenosis of the aortic valves, or into the cavity of the left ventricle when the mitral valve is in like manner affected. This occasions an incomplete filling of the arteries, and over distension of the veins and capillaries. Whatever muscular structure there is behind the obstruction, in the one case the left ventricle and in the other the left auricle, is called upon to do more work and the result is hypertrophy.

When the valves are incompetent, the blood passes freely through during the ventricular, or auricular contraction, but when the recoil comes, the valves not closing the aperature perfectly it regurgitates, overdistending the cavity into which it pours and dilatation is the necessary consequence.

It is very evident that where stenosis exists to a high degree, regurgitation is favored, and it is just such combinations that require accurate diagnosis and careful treatment,

While on the one hand it is doubtful whether the structural alteration in the valves is ever influenced by treatment, it is tolerably certain, on the other, that there is rarely any tendency to increasing change, except so far as this is occasioned by the altered heart's action, and the problem reduces itself to this; having the crippled valves as a constant factor, what is the best way to strengthen and maintain the heart so that it may be able to do its own normal work, plus the additional labor imposed by the change in structure.

The etiology of valvular disease is not clear enough to allow much room for prophylaxis. The great causative factor, acute rheumatism with the consequent inflammation of the myocardium, requires far more attention in view of this fact, than is usually accorded it. There can be no doubt that thorough treatment of this very common affection, either by the salicylates, or by the alkalies alone, has a tendency to avert the extension of the morbid process to the heart. The most important points are: free use and continued use of the agent employed, rest in bed, restricted diet and close attention to the secretions. The patient, for sometime after the attack, should be kept under observation, the specific treatment being now and then renewed, and any violent exercise probibited.

Among other precautionary measures is the avoidance of excess in the use of certain agents which affect the heart or its nervous system as alcohol, tobacco, tea, coffee, etc.

Attention should be directed to the heart, when certain other organs, as the lungs or kidneys, for example, are affected, since the heart is called upon, under these circumstances for more work.

It is believed by some, though never established as a fact, that certain avocations which require sudden violent exertion are causative agents in the producduction of valvular disease.

In reviewing the extensive literature of heart disease, it is interesting to note what may be called the evolution of its treatment. Before the discovery of auscultation and percussion the knowlege of cardiac affections was very rudimentary, and the treatment of the accompanying dropsy, while often quite efficient was entirely empirical. With Lænnec's discovery came more exact ideas of the morbid anatomy and symptomatology, and a consequent improvement in treatment. This great pioneer in physical diagnosis describes accurately most of the symptoms of valvular disease, especially the auscultatory ones, at great length, and disposes of the subject of treatment in a few words. He, together with most of those who preceeded him, had a total misconception of the phenomenon of hypertrophy, regarding it as a foe which should be vanquished at all hazards, and employed the most vigorous means to bring about a result, which fortunately for his patients, he must have failed in almost all instances to accomplish. He advocated the active depletive, and depressant system first instituted or at least enunciated by Valsalva. Although he was acquainted with digitalis he speaks most slightingly of it, and states that he never saw any good results from its employment. Corvisart employed blood-letting, warm baths, rigid diet, moderate exercise; he used diuretics and cathartics with much success for the relief of dropsy, and advised a tonic treatment.

Bertin, who followed him, made little change in this treatment though he recognized the advantage of digitalis. Hope, who wrote of heart disease not long after Lænnec, had a much clearer idea of its pathology than any of his predecessors. He recognized to some extent the conservatism of hypertrophy, and while he did not resist the generally accepted mode of treatment, namely, active blood-letting and depressing measures, showed that they should not be carried too far. He announced very clearly the indications for treatment in valvular disease, if we omit his slightly erroneous views concerning hypertrophy, and laid particular stress upon the importance of a well regulated life, and the observance of dietetic and hygienic rules. He employed digitalis, purgatives and diuretics, with tonics, especially iron, when the hypertrophy was not excessive, and recommended bracing atmosphere, cold baths and systematic exercise.

C. J. B. Williams believed in the efficacy of mercury and opium to subdue inflammation in the valves and employed blisters, blood-letting and tonics.

The foregoing examples will be enough to show the methods pursued during the close of the last, and the early part of the present century.

As digitalis became better known its employment became general, and it was regarded as the only medication in heart disease. That the indiscriminate use of this invaluable drug, to the exclusion of almost all others, has done harm, there can be no doubt. The treatment of heart disease became a most pitifully routine one, and only recently is the profession beginning to realize that in valvular disease we have an affection that needs the most careful attention and skillful medication. Valvular disease of the heart is not to be considered as an affection in which the only thing to do is to prescribe a certain quantity of digitalis to be taken every day and await the inevitable result. On the contrary it is a malady in which skillful handling will give the patient affected with it years, and often many of them, of comfortable, useful or even active life.

(To be continued.)

SOME ANATOMICAL AND SURGICAL NOTES UPON THE OPERATION OF SHORTENING THE ROUND LIGAMENTS OF THE UTERUS.*

BY RANDOLPH WINSLOW, M.A., M.D.,

Professor of Surgery in the Woman's Medical College of Baltimore.

There have been, perhaps, but few procedures brought to the notice of the profession which have excited so much adverse criticism as the operation of shortening the round ligaments of the uterus, introduced by Dr. W. Alexander, of Liverpool. Those who have practised the operation are, with some exceptions, favorably disposed towards it, and regard it as a valuable method in appropriate cases, whilst the mortality is almost nothing. But many of those who are not practically familiar with the operation raise all kinds of objections to it. They assert that it is an unjustifiable procedure, notwithstanding the very low mortality, and the very decidedly beneficial results which are obtained in many cases. It seems to me that it might not be inappropriate upon this occasion to present some reflections upon the anatomy and physiology of these structures, and of the parts concerned in the operation.

The round ligaments connect the fundus of the uterus within the pelvic cavity with the labia majora and soft parts upon the outside. At their origin from the uterus they are about the size of a turkey quill, but vary in size in different individuals. They are almost white in color until they pass into the inguinal canal, where they receive voluntary muscle fibres which causes them to become reddish or pinkish. Arising from the antero-lateral aspect of the uterus below the Fallopian tubes, and running in the anterior fold of the broad ligaments, they reach the internal abdominal rings, at which points the peritoneum is usually reflected from them. Each ligament gains a covering of deep fascia at the internal ring, and then entering the inguinal canal, finally reaches the external abdominal ring, and fraying out into bundles of loose tissue, is inserted into the labium majus, having attachments also to the tissues in the inguinal canal and at the external ring. As the ligament approaches its termination it loses its ligamentous appearance, becomes smaller, and, as has been stated, finally frays out into a mass of tissue which is with difficulty distinguished from the surrounding connective tissue. The ligaments vary in size in different individuals, and indeed upon different sides of the same individual, and it may be, that in a few instances they are absent upon one or both sides, but I think this must be quite uncommon, as I do not recall their absence in any dissection which I have made, and Dr. Alexander says that he has never failed to find them in one hundred dissections of the cadaver and in more than thirty operations upon living subjects. The function of the round ligaments is said to be that of approaching the uterine cervix to the male organ during coition, thereby facilitating conception. During health these structures certainly do not act in the capacity of ligaments, and, according to Savage, they are about the last tissues to be made tense when the uterus is prolapsed. Whilst the uterus is not retained in position by the round ligaments, tension on them is certainly capable of affecting an elvation of the organ when it is prolapsed, and in retroversion or retroflexion the displacement may be relieved by drawing upon them. I have demonstrated this so often to my own satisfaction, and to that of others, that I am convinced of its truth. I do not believe that the prolapsed uterus can be restored to its normal position by shortening the round ligaments, but it may be made to assume a position within the pelvis which approximates the correct one; and as I have already stated, a retroflexion or version can be certainly corrected if no cellular or peritoneal adhesions have taken place.

As it is rather difficult to find the ends of the ligaments at the external abdominal rings, it is proper that we should devote some attention to the

*Read before the Medical and Chirurgical Faculty of Maryland.

surgical anatomy of this region. The surgeon first locates the external abdominal ring with his finger, and then makes very much the same incision as in the operation for strangulated inguinal hernia. The incision should be two or three inches in length, and may be made either by cutting down upon the part or by transfixion. The hemorrhage will be slight, as there are only a few small venous and arterial trunks in this region, branches of the superficial epigastric and external pudic vessels. Immediately beneath the skin two layers of superficial fascia are found, between which are the superficial vessels and lymphatics. Under these structures we come to the fascia covering the ring, the external spermatic or intercolumnar fascia, and beneath this, or surrounded by it, the ends of the round ligaments are seen, and with them the genito-crural and ilio-inguinal nerves and the spermatic artery and veins. The end of the ligament is liable to be cut off accidentally, hence it is better to grasp all the tissues emerging from the ring with a pair of forceps. Attachments to the surrounding tissues and to the ring should be severed with the scissors, and traction made upon the ligaments. At first very little progress will be made, on account of the attachments to surrounding parts, which must be divided; and, if necessary, the aponeurosis of the external oblique may be split up in order to expose the ligament better. As the attachments to the ring and canal are snipped, the ligament pulls out with great ease, and appears much larger than at first, and of a pinkish white color. It may be pulled out three or four inches before it is arrested, and a reflexion of the membrane is seen to embrace it, which should not be incised, as when this is done a serous fluid escapes, showing that the peritoneal cavity has been opened. After the ligaments have been drawn out until resistance is felt, they are to be secured to the external abdominal ring by a few points of suture (silk being preferable, as it holds longer than catgut), and also included in the suturing of the skin wound, their redundancy being cut off. The uterus during the operation should be straightened with a sound, or, if prolapsed, pushed up with the sound or fingers, and subsequently a pessary should be worn for some weeks, until firm union has taken place.

As has been said, the operation is almost devoid of danger, the mortality probably being from one to two per cent.; hence it is not unjustifiable on the score of excessive death rate. That the results are fairly good is attested by Drs. Alexander and Imlach, of Liverpool; Polk, of New York; Ashby, of Baltimore, and others; but it cannot be made to meet every indication, and sometimes failure results; hence there must be a more careful selection of the cases for operation. It seems to me that it is an ideal operation for retroflexion and retroversion, as it will undoubtedly hold the fundus of the uterus in a forward position, provided the organ has been first straightened by means of a sound or intra-uterine pessary. Many cases of procidentia may also be corrected by shortening the round ligaments, but the operation finds its most perfect application in retroflexion. A considerable anatomical knowledge is required to find these ligaments, but the same skill required for the execution of many other surgical procedures; hence this is no valid objection to it. I have dissected this region many times, and have operated upon two living subjects, without failing to find the ligaments in any case, as far as I can remember; hence I do not think they can be so frequently absent as has been stated. Dr. Alexander has made one hundred dissections of the cadaver and has operated more than thirty times, and has never failed to find these structures, and he thinks the failure of others to find them was due to lack of skill and anatomical knowledge; but we can hardly agree with this opinion, as Dr. Mundé failed to find them three times in six cases, or fifty per cent. of the cases operated on by him. This experience is phenomenal. My experience with the operation is limited to three cases, two of them operated on by myself, and the third by my friend, Dr. Thos. A. Ashby, at

which operation I was fortunate enough to assist.

Case I. Woman about 40 years of age, with complete prolapse for six months. It was found impossible to retain the uterus within the vagina with a pessary, and as the organ was eroded, and the disability of the patient marked, I decided to shorten the round ligaments and to narrow the greatly dilated vaginal orifice. On September 11, 1884, the ligaments were shortened moderately, about one inch on one side and one and a half inches on the other. Subsequently the vagina was narrowed and the peritoneum restored. No bad results of any kind occurred although the operation of shortening the ligaments was imperfectly performed, or at least not enough of these structures was pulled out, the result of the combined operations has been very favorable. I examined this patient at the end of a year and found the uterus well within the vagina, and the woman able to do hard work as a nurse in the insane wards at Bay View.

Case II. A fat widow, 55 years of age; complete procidentia of two years duration, the uterus hanging between the thighs; vagina enormous, and its orifice dilated; vagina and bladder prolapsed; ligaments shortened September 2, 1885, four inches of the cords being pulled out on each side; serous fluid escaped during the isolation of the bands, probably due to opening of the peritoneal cavity. The ligaments were stitched into the rings, and also included in the external incision; subsequently narrowed vagina and restored peritoneum. Result after twelve months: uterus retained in vagina and had not escaped since the operation, but the cervix was very low down. She expresses herself as having been much benefited by the operation, but whether the benefit is lasting I do not know.

Case III. By Dr. Ashby. (See Maryland Medical Journal, February 12, 1887.) Mrs. ———, 50 years of age; subject to menorrhagia for a long time; uterus low in pelvis; fundus resting against sacrum; several uterine fibroids, from walnut size to that of an apple; great discomfort, owing to pressure against rectum, causing flatulency and constipation. She suffered also during the menstrual period from cramp and nausea. No mechanical or local treatment was of use, hence shortening of the round ligaments was proposed and accepted. Operation on June 8, 1886, performed in the usual manner. Rapid healing of wounds, and marked improvement in health resulted, so that from being a confirmed invalid she is now able to perform all the ordinary duties of life with ease and comfort.

In conclusion I wish to emphasize the following facts: 1st. That where the uterus is displaced backwards, traction upon the round ligaments will cause the fundus to approach the symphysis, and when the ligaments have been shortened and secured to the external abdominal rings, the uterus will be retained in its corrected position. 2d. That whilst the round ligaments are muscular structures which do not subserve the purpose of supports for the normal uterus, when the uterus is in the condition of procidentia, traction on the ligaments does cause the womb to ascend in the pelvis, and to occupy a position behind the symphysis, but cannot cause it to return to its normal position. 3rd. The successful performance of this operation presupposes a considerable anatomical knowledge and surgical skill, and it should not be undertaken by one who has not these qualifications. 4th. After the tissues have been divided and the external abdominal ring exposed, the loose tissue emerging from the ring should be seized with catch forceps and separated from the contiguous parts by snipping the reflections connecting the ligament with the inguinal canal, external abdominal ring and labium majus. When this has been done the ligament will pull out two or three inches with great facility. 5th. In a certain number of cases the ligaments will be absent on one or both sides. 6th. Failure will result in a considerable percentage of cases. 7th. The mortality is very small, not over one to two per cent. 8th. After this operation pregnancy has occurred, and has been followed by a normal position of the uterus.

OBSERVATIONS IN CHIARA'S CLINIC AND THE HOSPITAL ST. MARIA NOUVA, FLORENCE, ITALY.*

BY CHARLES WARRINGTON EARLE, M.D., OF CHICAGO.

With the exception of an occasional paper, an abstract of which may appear in some of our Journals, we hear but little of what is being done by members of our profession in Italy. It is true that a few names of Italian writers and teachers may be seen in our works, but as a place for medical study it is rarely, if ever, suggested.

It was my good fortune to be able to remain nearly two weeks in Florence and to form the acquaintance and friendship of Dr. Dominic Chiara, Professor of Gynecology in the University, whose courtesy and kindness I shall ever have occasion to remember. It was my purpose to remain but a single day in the city, but I found it impossible to leave under three days and so made inquiry for a hospital at which I excepted to make only a passing visit. I was directed to the Hospital St. Maria Nuova, where I found Prof. Chiara and Dr. Kirsch, one of his assistants, both speaking some, and the latter very excellent English. I soon found that I could take a course in operative obstetrics and see a number of the larger gynecological operations and so decided to remain.

Through the great kindness of the director, I was given one of the special rooms in the institution, with a servant at my command. This is the largest hospital in Florence, and was founded in 1288 by Folco Portinari, the father of Dante's Beatrice. It was enlarged in 1574, has a large library and can accommodate eighteen hundred sick people.

The buildings which make up this hospital are old, and are about three stories in height and built almost entirely of stone. In all probability they are old Catholic institution, indeed some relics and pictures remain which make this supposition certain. The place is full of yards, squares and trees, passages and corridors.

The director of every department occupies rooms in the hospital, as do also his assistants, and students are all taken in neighboring restaurants. Among the students were several from South America who spoke some English. There is in the hospital a large class of young women who are in training for nurses and midwives.

The reception rooms for the use of patients, and those where the admission to the hospital are made, are closed two or three times every day and thoroughly fumigated by burning sulphur, and throughout the entire building at very close intervals are placed basins for washing hands and arms. These are all provided with hand-brushes and soft sublimate soaps.

When the director of the clinic and his assistants go through the wards, they are dressed in dark-colored gowns, and strange as it may seem to us, wear their hats and caps, which are not removed while around the bedside of the sick.

Prof. Chiara, President of the Medical School and Director of the department of gynecology and obstetrics, was educated in Turin and then served for a time in the army. The two following years were spent in Paris and then two years in the Medical Clinic in Turin, and the same number of years in the Obstetrical Clinic. He was professor of obstetrics at Parma for five years and for ten years professor and director in the Maternity Hospital in Milan. For the last four years he has been professor of gynecology and diseases of children and director of this department in the University of Florence. He has written a work on obstetrics for midwives which has been translated into French, the edition being now exhausted. He has also written an essay on spontaneous evolution and articles on deformities of the pelvis, Cesarean section, fibroids of the uterus, extirpation of the ovaries, and antiseptics in obstetrics.

The method of teaching in this hos-

*Read before the Chicago Gynecological Society, June 24, 1884.

pital is entirely clinical and the work in the wards and operations in the amphitheatres are always spoken of as the clinic, and not the hospital.

Chaira is authority in regard to the subject of spontaneous evolution. The following is an abstract of his thesis printed in 1878:

In February, 1877, a woman was admitted to his hospital in Milan who had been in labor twenty-four hours and had been sent to him from the country in a very uncomfortable conveyance. A midwife had seen her early, ruptured the membranes and found the shoulder and cord prolasped, and had called a surgeon to assist her who tried in vain to turn. She was now started for Chiara. When she arrived at his hospital she was in a fainting condition and died in twelve moments after, while means were being resorted to, to resuscitate her. It was found on examination that the left arm was thoroughly protruding; to determine exactly what nature had done toward delivering this woman, it was determined to congeal her, and make exact drawings.

After the "twenty-four post-mortem hours" she was kept in ice and salt and then divided in an antero-posterior direction by means of the saw. A large blood clot was found around one of the legs of the fœtus and an abundant extravasation of blood (1200 grams) in the periuterine connective tissue. These may have been produced either by the doctor in trying to turn, or in her journey to the hospital over the rough roads.

What should have been done? If the shoulder was not impacted too much, it was the duty of the surgeon who first saw her to try to turn. If the shoulder had been wedged into the pelvis when Chiara first saw it and the child had been alive, he would have let it alone, trusting to nature, but helping along as best he could. If it had been dead, he would have performed embryotomy and delivered at once.

If he had tried to save the child he would have watched the mother carefully and if her life was endangered he would have sacrificed the child.

He believes that in some cases turning by those not particularly skilled is more dangerous to the mother than the crotchet; a very dangerous instrument, as he says, much more difficult and pernicious to the mother than cephalotripsy in cases of not very narrow pelvis; more difficult and hazardous than embryotomy.

Prof. Chiara's conclusions, with slight alterations in order to overcome the peculiar Italian expressions, are as follows: First, the general law is that shoulder presentations, the seventh month of pregnancy being past, require version. Second, the necessary conditions for the operation being absent, this is contra-indicated. Third, there are absolute contra-indications to turning, deep shoulder impactment is a permanent contra-indication, and the sticking of it to the pubic arch shows that the second stage of spontaneous evolution has already been accomplished. Fourth, spontaneous evolution is a phenomenon of more frequent occurrence and less dangerous and difficult than authorities admit. Fifth, finding an absolute and permanent indication for turning in shoulder presentation, we ought, if the fœtus is alive, to look for spontaneous evolution, helping the latter with means that do not injure the fœtus. The fœtus being dead, we should resort immediately to embryotomy.

Obstetrics is practised here with the utmost antiseptic precaution, even in a greater degree than Vienna.

The Lying-in Chamber.—This a large airy room, with hardwood floors and with walls that can be thoroughly disinfected. The bed is made so that it can be folded upon itself, making it one-half as long as usual. This arrangement is so that when the bed is folded on itself all the ordinary obstetrical operations can be performed with ease, as the bed is now the height and length of the usual operating table.

A woman is brought into the lying-in chamber when the os uteri is well dilated if she is a primipara; if a multipara, she is brought in somewhat earlier. If time is permitted, she has a carbolic-acid bath before being brought into the

lying-in room. The bed-clothes are used only once. During the early stages the woman is left to do about as she pleases, but no unnecessary examinations are made and *never* until the hands are thoroughly disinfected. A vaginal injection is given about the time the head begins to press against the perineum, and as soon as the vulva begins to open the spray is turned on to the parts and kept constantly going until after the completion of the third stage. During the latter part of the confinement, the attending physician is busy making all manner of measurements of the abdomen and pelvis. He also listens carefully for the fœtal heart-sounds, from which he decides in regard to the advisability of hastening the labor. The placenta is always expressed, and the fingers or hands never passed into the vulva unless absolutely necessary.

The immediate delivery, with all its details, is done by a midwife, and no pulling or tugging or dilating of the os or perineum is attempted at any time. The parts are frequently washed, and the occiput made to hug the pubic arch by pressing the head up, the tissues of the perineum being between the hand the head.

If a rupture is threatened, the parts are supported by the extended hand and the edge reinforced, if I may use the term, by drawing down more tissues. The cord of the child is tied by passing around it a little rubber tape, and the child is removed from its mother to be weighed, then washed, and measured in every part of its little body, length, breadth and thickness, head, thorax, pelvis, and legs. But very little, if any, ergot is given to the mother, and in the course of a few hours she may be seen in the general ward, with her baby in a little cot by her side.

The operating room in this hospital has been recently erected, and I did not see a more elegant one in Vienna, Berlin, Paris, or London. It is about fifty feet square. Two tiers of seats for students are built away from the wall, but with room enough within the square for the operator and his assistants. The temperature is raised from 80 to 100° F., and for twenty-four hours previous to a large operation sulphur is burning in the room. All clothes and linen to be used about the patient are fumigated and placed in closed baskets. Instruments are boiled in a ten-per-cent. solution of carbolic acid and then soaked in a seven-per-cent. solution. Inside of the raised seats is the operating table. The floor is of stone. Upon one side is a pile of disinfected linen. Next to it, a table containing hæmostatics; next, one upon which all kinds of restoratives are placed, with a hypodermic syringe filled with brandy or ether ready for use. In a remote corner is a receptacle to receive all soiled clothes. Upon the other side of the operating table are all the instruments in trays, and a battery for emergencies is in a convenient position. At one end of the room are two or three places for washing, around which the director of the clinic and his assistants are seen for sometime previous to the operation scrubbing their arms and hands and cleaning their nails. Two or three instruments for spraying are placed in an appropiate position, and are worked during the entire operation.

It was here that the most interesting operation, if I except Billroth's operation for extirpation of the pylorus, that it was my good fortnne to witness, was performed. It was Cæsarean section in which both mother and child were saved. The operation was delayed until the os was fairly dilated. The operating room had been thoroughly prepared and the woman properly disinfected. An anæsthetic was given and the abdomen repeatedly disinfected, even the hairs along the median line being plucked out. The incisions through the abdominal walls were the usual ones, the only additional procedure being that a thread was passed through the tissues at the upper and lower end of the abdominal opening. The peritoneal covering of the uterus was incised and dissected back about one third of an inch, so that a small piece of the uterine wall could be removed and the peritoneum folded over the end. The position of the placenta was carefully ascertained and an open-

ing made into the membranes surrounding the child, and the feet seized and the child extracted. It was given at once to a nurse for resuscitation, who shook it violently, its head hanging downward. The placenta was now taken out of the uterine cavity, and carbolized water was used in great quantities. The incision through the walls of the uterus was very carefully closed with interrupted sutures, then a layer less widely separated, and to keep this secure the chief midwife sewed over and over with catgut sutures the peritoneum, until it seemed absolutely impossible for anything to get into the abdominal cavity from the uterus or from the abdominal cavity into the uterus. The external wound was closed by the usual method. Neither cotton-batting nor any other of the usual dressings were applied on the outside, but a flat bag of shot, weighing from two to six pounds, was laid on the abdomen. Drainage through the vagina, ice over the hypogastrium; the woman made a good recovery.

I had the opportunity of examining this woman's pelvis a few days before the operation. I could feel very plainly the promontory of the sacrum, and should judge that the conjugate was about two and one-half inches. The os was dilated to the size of a half dollar and craniotomy could have been well performed, but Chiara was intent in trying to save the mother's, and also the child's life. He succeeded in doing both.

None of the grave complications which are dreaded were present in this case. The hemorrhage after the incision through the uterine peritoneum was very slight, and after the extraction of the child only a moderate amount of blood was lost. After the wound in the uterus was closed, the abdominal opening was then closed as I have stated. My notes do not state whether or no a rubber cord was place around the uterus at the supra-vaginal junction.

Case I.—Coming to speak of practical work, the first thing I noticed was the management of occipito-posterior positions. I was sorry to find that they knew nothing of our Dr. Sawyer's method, and the usual way of treating these cases is to apply forceps, first along the side of the mother until rotation has taken place. This brings one blade of the forceps under the symphysis, when they are taken off and again applied along the sides of the mother.

Case II.—In difficult breech presentations, they do not favor the use of the forceps, as has been suggested by some excellent authorities, but simply bring down one of the feet. In other cases, they even recommend the blunt hook, which is a practice we would hardly suggest until many other procedures had been tried and proved of no avail.

Case III.—A patient with uremic poisoning was in the eighth month of pregnancy and commenced to have dyspnœa. Albumen was discovered in the urine and a purge was administered. No relief came, and it was decided to take no more risks in regard to the mother's life, and a catheter was introduced and in the course of eight or ten hours labor commenced. She had no convulsions, and the child was born alive. The albumen rapidly disappeared.

Case IV.—Attempts had been made to reduce an inverted uterus according to the usual methods but without success. The tumor in the vagina was pulled down and a wire ligature placed around it, which was daily tightened a little until about the eighth to the twelfth day the mass came away. Antiseptic precautions are taken throughout this operation to prevent septicæmia.

Case V.—I did not witness this operation, but I saw the patient a few hours after. The cause of the removal of the uterus was a stenosis of the pelvis from a bony growth. The operation lasted about three-quarters of an hour, and the child was saved. The Porro was done in preference to Cæsarean section in order to save the woman the danger of a second operation. In a slightly contracted pelvis, the Cæsarean section would have been done and in a case of pregnancy the second time, the labor would have been induced at the seventh or eighth month and the child saved. On the eighth or tenth day after opera-

tion the stitches were all removed, and the patient was around the ward doing well.

Case VI.—Laceration of the cervix; this accident is treated by the cautery or as they say "burning." The operation which is done so frequently in our country is not well thought of there; the particular argument used against it being, that if a woman has another child, there will be another laceration. The curette is frequently used, and all hypertrophied tissues either upon the neck of the uterus or within the canal are scraped away.

Case VII.—Extirpation of the spleen; this abdominal tumor was supposed to be ovarian. Usually a diagnosis is made by tapping and the fluid examined by the microscope, but in this case the precaution was not taken. Upon opening the abdomen, the tumor was found to be a cyst of the spleen filled with echinococci. These were thoroughly scraped out, the cavity cleansed, and the edges of the cyst stitched to the abdominal walls. A glass drain was placed at the bottoms of the wound, and it was thoroughly washed out with bichloride and dressed with iodoform, and the woman made a good recovery.

Case VIII.—The diagnosis of tumors within the abdomen was not usually made out until after the abdomen was opened. A case was presented with two growths within the abdomen. It was supposed from the pallor of the patient, and the rapidity with which the tumors increased, that they were sarcomatous. The abdomen was opened with all antiseptic precautions. Preparation for every possible emergency was arranged, and upon opening the abdomen it was found that the growths were fibroids. The stump was transfixed by a large double thread and tied on either side. The top of the stump was cut out so that it was cup-shaped and the peritoneal covering brought over it and stitched with ordinary black silk. Everything was dropped back into the cavity and the abdominal wound closed. The temperature rose one and a half degrees the third day, and the woman made an excellent recovery.

Case IX.—Abdomen opened for supposed fibroid, but found to be a dermoid cyst. The other ovary was also found to be cystic. The diseased part was amputated, the hemorrhage controlled by Paquelin's cautery, and the healthy part of ovary dropped back into the abdominal cavity, which was then closed in the usual method. Chiara was particularly conscientious in regard to the extirpation of the ovaries. He always saved enough healthy ovary, if possible, so that the woman could conceive if she had the opportunity and it was her duty to do so.

Case X.—Sarcoma of the Ovary. At this operation it was found that extensive adhesion had taken place, and only a part of the neoplasm could be removed. The covering of the growth was stitched to the abdominal walls and the cavity thoroughly drained, and an iodoform dressing applied twice each day. It was estimated that it would take about six weeks for this cavity to fill in. Iodoform was the principal dressing used, and she had but little, if any fever.

Case XI.—Pelvic Hæmatocele. If a woman goes into collapse with symptoms of hemorrhage, and continues to get into a more critical condition, the abdomen would be opened. If she rallies quickly, there would be hopes that it would be absorbed without operation. If the fluid remained, it would be regarded as good practice to draw it away. The same idea in regard to extra-uterine pregnancy as a cause of pelvic hæmatocele obtains with them as with us.

Case XII.—Pelvic Cellulitis and Peritonitis. Ice on the abdomen, with enough morphine to quiet pain, is the treatment during the early stage. When the inflammatory stage is past, use hot poultices; keep the patient still, and if any hardened points can be felt they are painted over with iodine, and iodine water douches are ordered. But little confidence is placed in such remedies as iodide of potassium and muriate of ammonia as absorbents. If fluctuation is detected, the antiseptic needle is used, and the pus or serum is drawn away. If the pus continues to collect, a drain is inserted.

Case XIII.—Cases of chronic inflammation of the uterus are treated by application of iodine and hot-water douches, to which the tincture of iodine is added. Pastils of alum and sulphate of copper are sometimes introduced into the cervical canal. Intra-uterine injections, particularly of the tincture of iodine, are very frequently used. If done antiseptically, and rest insisted upon after, no bad results occur.

Case XIV.—Closing of the Vagina for Prolapse. After the menopause, if the uterus and appendages are prolapsed to such a degree as to cause great trouble and suffering, the vagina is closed by a plastic operation. I saw operations of this kind, and they appeared *to be perfectly successful, the patient being relieved*

The following objections are made to the Tarnier forceps: first, they cannot be made antiseptic; second, if applied and force exerted, you do not make this force in the line of the axis of the superior strait; third, you are making traction without knowing how much compression force you are using.

Hypnotism was practised to some extent, particularly in nervous diseases. One case of hystero-epilepsy was particularly interesting. It was of long standing and had been treated with electricity, tonics, etc., with the hope that, as the young woman developed, the attacks would become diminished. But they continued, and the question of extirpating the ovaries had been considered and was still under advisement. After an intermission of weeks she began to have these again. She would fall upon the floor, kick violently, and cry out, and presented in every respect all the phenomena of this distressing disease. Dr. Kirsch, one of the assistants in the clinic, after calling her attention sharply to a little looking-glass or the ticking of a watch, placed his thumbs over her eyes; she was perfectly still and asleep in a moment. She was put to bed and remained perfectly quiet for some hours until the same doctor approached her bedside, spoke her name rather sharply, when she opened her eyes and again became perfectly quiet and was soon around the wards. They do not pretend to know the pathology of hystero-epilepsy, nor make any pretentions to any particular power in order to produce hypnotism. It is believed that almost any person with a well-balanced nervous system could produce this state in a hysterical woman. Hypnotism was becoming very frequent, and public exhibitions were being given to such an extent, that some time last year the government authorities in Italy prohibited its performances except for medical purposes.

Correspondence.

OBSTINATE URETHRITIS.

Editor Maryland Medical Journal:

Dear Sir:—I had always been at a loss to know why some cases of urethritis were so easily managed and why others proved so obstinate, until I met with one which I think explains it. Whilst treating a case, recently, some of the pus from the urethra lodged in the sulcus formed by the junction of the gland penis with that organ, and gave rise to pustules which required some force to rupture. They contained matter exactly similar to that issuing from the meatus urinarius. My opinion is that these closed pus cavities extended into the urethral canal, and they probably exist in this situation in most of the refractory cases of this disease. No improvement took place, in the above case, until a sound was introduced, which, I suppose opened the pustules situated within the cavity of the urethra. The immense amount of pus which followed the withdrawal of the sound in this case, proved that pus cavities had been opened by its introduction. Injections, in these cases, can do no good, as the pus has to be evacuated before the medicament can reach the whole of the diseased surface.

Yours truly,

Edward Anderson, M.D.
Rockville, Md.

Abstracts and Extracts.

Ascending Paralysis After Whooping-Cough.—Dr. Möbus, of Leipzig University, has forwarded to us a reprint from the *Centralblatt für Nervenheilkunde*, containing an account of a case of this affection, which appears to have been but seldom if ever described. A child, aged 3, was brought to the hospital on November 23rd, 1886, on account of loss of power to stand or walk. The mother stated that the child had lately been affected with severe whooping-cough, which had begun six weeks previously, and was then replaced by a simple cough. As the whooping-cough subsided, the loss of power came on. The legs were flaccid and without any power. The knee-jerk was absent on both sides, the planter reflex was absent on one side and indistinct on the other; the electrical excitability of nerves and muscles was almost normal, and sensibility was preserved. By December 13th the legs were better and the child could stand again; but the arms were then almost completely paralysed. The head also fell to one or other side, but the abdominal and dorsal muscles generally unaffected, except those of the shoulder and neck. Finally the diaphragm ceased to act, the abdomen being retracted at each inspiration. The child ate and drank well, but the voice was weak. No atrophy or anæsthesia was found; the abdominal reflex was indistinctly, the cremasteric distinctly, present; the tendon reflexes were absent in both arms. The bladder and rectum acted normally. The face was somewhat cyanotic, and the bronchitis had got worse, causing suffocative attacks. On December 17th an improvement set in, first in the muscles of the head, then in the diaphragm. The bronchitis disappeared, and by January 8th no paralysis could be made out, but the tendon-reflexes were still absent. Early in February the knee-jerk was indistinctly perceived again on the left side. The paralysis was thus essentially an ascending one, strictly limited to the motor nerves. The sensibility, the superficial reflexes, and the functions of the cerebral nerves were unaffected. But the lesion was slight, because there was neither atrophy nor alteration in electrical sensibility; moreover, there was a quick recovery. The abdominal, dorsal, and intercostal muscles were unaffected; had the latter suffered, death would have been inevitable in a short time. The diagnosis lay between slight myelitis and so-called multiple neuritis; Dr. Möbus selected the latter, because the bladder and rectum were unaffected. What was the relation between this paralysis and the whooping-cough? The virus of each of the infecting diseases seems to affect particular groups of nerve-fibres, though at present that of diphtheria is the only one thus pathognostically defined. But ascending paralysis must be very rare after whooping-cough, for except Surmay's article on Two Cases of Paralysis after Whooping-Cough (*Arch. Gén.*, i, p. 678, 1865), which was not in Dr. Möbius's hands, all other papers which he consulted related to different symptoms altogether, chiefly in connection with cerebral hemorrhages; for example, that of Dr. Samuel West (Journal, January 22nd, 1887), "Right-sided Hemiplegia, with Aphasia and Athetosis, which developed during an attack of Whooping-cough." —*Brit. Med. Jour.*

A New Local Anæsthetic.—No physician nowadays can claim to eminence in the medical profession unless he has discovered a local anæsthetic. There is no doubt in our mind that this fact is universally recognized. Witness the innumerable claims to the dignity of a new anæsthetic continually before us. The last candidate for these honors appears to be a joint discovery by a veterinary physician, Mr. Goodman, Dr. A. M. Seward, of Bergen Point, N. J., and Dr. J. Herbert Claiborne, Jr., of New York. Mr. Goodman was first on the scent by noticing the apparent anæsthetic properties of a poultice made from a pile of leaves raked haphazard from the ground. Dr. Seward, according to Dr. Claiborne, discovered an alkaloid in some leaves submitted to him by Mr. Goodman, and he terms the

alkaloid, of which the process of extraction is not given, stenocarpine. It appears, however, that the botanical name of the tree from which this substance is derived is unknown. According to Mr. Goodman, the source of the leaves employed by him is known in Louisiana, the locality where this substance was first employed, as the tear-blanket-tree.

It grows to the height of thirty-five to forty feet, with a diameter to the bole of about eighteen inches and a spread of foliage of about thirty to thirty-five feet. The leaves resemble those of an acacia. The bark is smooth. From the ground up the tree is furnished with clumps of forked spines or thorns, the parent spine springing at right angles from the bough or trunk. Though Mr. Goodman is a native of the region, he has never seen the tree blossom. As fruit it bears pods eight or ten inches in length, flat and slightly curved, containing seeds and a viscid juice.

The spines are very tough and highly polished, and the wood is extremely tough. It grows in clumps and singly, and is abundant in Louisiana.

From the likeness of the tree to the *Acacia stenocarpa* Dr. Seward dubbed the new alkaloid stenocarpine. It would have been better, however, to withhold the naming of the alkaloid until the botanical name of the tree had been known.

Dr. Claiborne's share consisted in clinical experiments with the substance supplied him by Dr. Seward. According to Dr. Claiborne (*Medical Record*, July 30, 1887), two drops of an aqueous solution produced in a few minutes complete insensibility of the cornea and conjunctiva, with dilatation of the pupils, the anæsthesia lasting for about half an hour, the dilatation of the pupils for thirty-six hours. This substance would even appear to be more efficacious than cocaine as an anæsthetic, for Dr. Claiborne reports instances in which the application of a few drops of a two per cent. solution on the skin produced almost absolute anæsthesia, so as to permit the painless removal of tumors, warts, etc. In the nose also applications produce complete anæsthesia, and in the case of the ear, the instillation of a few drops permitted the touching of the drum-membrane without pain.

As to whether we are to have another disappointment in this case or not the future alone can tell.—*Therapeutic Gazette.*

Treatment of Dropsy by Permanent Baths.—In the course of a paper upon the use of permanent baths (at a temperature of about 95° F.), L. Riess, after giving instances of their value in cases of spinal disease and injury, adduces some rather remarkable facts of their efficacy in the treatment of dropsy, whether cardiac or renal. These cases are often complicated with bed-sores erysipelas and gangrene, for which such treatment would be suitable, but he says that he long witheld it because of the idea that cardiac or pulmonary disease would be a contra-indication to its employment. However, in 1879, in a case of extreme cardiac dropsy (mitral and aortic disease) with considerable erysipelas and cutaneous gangrene of the legs, he determined to try the effect of the permanent bath as a last resort, not without some misgiving lest the immersion should increase the dyspnœa and dropsy. The result proved quite the reverse, for a rapid improvement took place, and when, after having been in the bath a fortnight, the patient returned to bed, the dropsy and other severe symptoms had disappeared. Since then Riess has adopted the procedure in a large number of dropsical cases, and invariably with benefit, the dropsy in most cases (whether renal or cardiac) diminishing within the first forty-eight hours in a striking degree. The quantity of urine is not increased *pari passu*, so that it is suggested that the effect of the permanent bath is to increase the functional activity of the skin, which is contrary to the prevalent notion. The good results obtained in cases of chronic rheumatism so treated are also mentioned, and it is held that the application of the method is practically very simple, it being necessary, of course, to

allow the patient to lie comfortably suspended in a hammock, and to place a thick woollen covering over the bath to retain heat as much as possible. At first it is well to allow the patient to leave the bath at night, but as he gets more used to it he may spend days and nights in it with much comfort both to himself and his attendants.—*The Lancet.*

A Table Made of Human Tissues.—In the Pitti Palace, at Florence, is a table, says the *Medical Press*, which for originality in the matter of construction and ghastliness in conception, is probably without a rival. It was made by Giuseppe Sagatti, who passed several years of his life in its manufacture. To the casual observer it gives the impression of a curious mosaic of marbles of different shades and colors, for it looks like polished stone. In reality it is composed of human muscles and viscera. No less than a hundred bodies were made use of for the material. The table is round, and about a yard in diameter, with a pedestal and four claw feet, the whole being formed of petrified human remains. The ornaments of the pedestal are made from the intestines, the claws, with hearts, livers, and lungs, the natural color of which is preserved. The table-top is constructed of muscles artistically arranged, and it is bordered with upwards of a hundred eyes, the effect of which is said to be highly artistic, since they retain all their lustre and seem to follow the observer. Sagatti died about fifty years ago. He obtained his bodies from the hospitals, and indurated them by impregnation with mineral salts. To add to the horror which such a piece of furniture is calculated to inspire in the minds of most people, the fate of Count Rittaboca, its last owner, may be related. One Christmas Eve he and his friends were playing cards on this table, when suddenly he jumped up, pale and agitated, overcome by the fixed gaze of these petrified eyes. Yielding to a sudden attack of violent mania, he stabbed himself and fell upon the table. His heirs, as may be imagined, were very pleased sell this funereal object to the Government, who installed it in its present situation.—*Bost. Med. and Surg. Jour.*

Heroic Treatment of Incomplete Abortion.—Two papers in the March number of the *Jürnal Aküsherstvai Jenskikh Bolêsneï*, by Dr. Fisher and by Dr. Khazan, deal with the treatment of incomplete abortion by thoroughly scraping out the interior of the uterine cavity with a sharp spoon. Neither of these physicians has found it necessary to use an anæsthetic during the operation. Dr. Fisher places the patient on the back, Dr. Khazan on the back or left side. The most careful disinfection is carried out by both, Dr. Fisher places a double current catheter passed into the uterus, Dr. Khazan, mopping out the cavity with sponges. The former practitioner does not find dilatation of the os necessary, while the latter uses, if required, Hegar's bougies or tents. After the uterine cavity has been scraped quite clean, it is again disinfected, Dr. Khazan going so far as to mop it out with a solution of perchloride of iron. The vagina is plugged, and ergot, or ergotine, administered. Dr. Khazan makes the patient lie on her face for the first two days.—*Brit. Med. Jour.*

On the Communicability of Typhoid Fever Through the Air.—At the Medical Society of the Hospitals, session July 22d, M. Devaiz communicated the fact of an epidemic of typhoid fever which he had recently witnessed, and which seemed to show that this disease may sometimes be propagated by the air, as well as by drinking-water. The water of the locality had, in fact, been examined very thoroughly, without any micro-organisms being discovered. On the other hand, the dejections of the first patient attacked had been thrown, without previous disinfection, into a privy, near which slept three persons who next fell victims to the disease. It seemed, therefore, probable that the typhoid germs had been transported by the air, and that it was to this vitiation of the air that the communication of the disease in, at least, some of the instances was due.—*Bost. Med. and Surg. Jour.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, SEPTEMBER 3, 1887.

Editorial.

LEGAL RESPONSIBILITY FOR THE UNSKILFUL USE OF THE FORCEPS.—We do not remember to have read or heard of a suit for damages growing out of the unskilful use of the obstetrical forceps prior to our notice of the following case. That the misuse of this instrument might be regarded just ground for a civil suit no one can question, but the difficulties in the way of proving a case of damages against an obstetrician are quite innumerable and so formidable as to deter most plaintiffs from a recourse to the law.

Who will not assert that the forceps unskilfully used are responsible for grave injuries to the perineum? Many gynecologists, know this to be the fact, yet when the evidence is demanded to support this statement the modifying circumstances are so numerous as to wholly destroy its value. As to the forceps being used at the proper time, in a proper manner and with necessary skill and care in any given case who is to be the judge? How many such cases are witnessed by any other physician than the operator himself? Admit too that lacerations occur in the hands of most skilful obstetricians and the difficulties in the way of proving an unskilful use of the forceps increase.

The following case tried before Mr. Justice Cave at Guilford, England, July 21st, 1887, (*British Medical Journal*, August 13, 1887) is of striking interest in this connection since it explains an important medico-legal question and shows the difficulties which must attend this character of medical litigation.

In the case in question action was brought to recover $2500 damages for alleged negligence, unskilfulness, and misconduct of the defendants in their treatment of the plaintiff's wife in and about her confinement. The plaintiff, one Gibson, alleged that he engaged the defendant, Jeffries, to attend his wife in her confinement and that Jeffries negligently directed the defendant Hills to attend her; that Hills did not exercise a reasonable degree of skill or care and was guilty of gross negligence and unskilfulness in conducting the delivery whereby the plaintiff's wife was seriously hurt, wounded and mutilated.

Hills alleged that the labour was difficult and that after waiting a reasonable time, and finding the pains inaffectual and the head jammed in the pelvis, he, having obtained the husband's sanction, proceeded to deliver by the forceps. He did so, considering her condition was one requiring such assistance to effect delivery. The perineal rupture was unavoidable and was not caused by any neglect on his part. To repair the wound he had inserted three or four catgut sutures and had given proper directions to the nurse to keep the patient quiet afterwards. On the fourth day after delivery Hills handed the case over to one Chapman, another assistant of Mr. Jeffries. Chapman gave evidence to the effect that he assumed charge on the fourth day, that he found the perineum deeply lacerated and the wound in a very bad state. He considered the forceps had been used too early in the case and two continuously, without giving the parts time to recover themselves, and that during the delivery the perineum ought to have been supported by the hand.

Mr. Jeffries witnessed that he had frequently engaged Hills before as his *locum tenens*, and that he had always given satisfaction.

Dr. Graily Hewitt stated that the plaintiff's wife had consulted him about the injury to her perineum four months subsequent to the birth of her child. He found the perineum had been torn,

the injury extending into the rectum. Dr. Hewitt refused to operate upon the case when he learned that an action for damages had been commenced by the patient and her husband. Dr. Hewitt expressed the opinion that as to the forceps being used at the proper time, no opinion could be given unless after examination of the condition at the time; it was for the practitioner to judge of that. His further testimony was corroborative of the correctness and skill of Mr. Hills' management of the case. The learned judge in summing up the case observed that medical practitioners were expected to bring to bear a reasonable degree of skill and care, otherwise they became liable.

The evidence showed that Chapman had quarreled with the defendant Jeffries and his testimony was impeached. Three medical men witnesses for the defence alleged that it was impossible for them to say, unless present at the time of labor, whether instruments were properly used or not; and that to form a judgment on this point the state of the patient must be known and considered. The judge virtually instructed the jury to bring in a verdict for the defendants which was accordingly rendered as follows: "For the defendants, but we think there was not sufficient medical supervision over the nurse in the after treatment."

It was shown by the evidence that Mr. Hills had failed to inspect the perineal wound and had left its attention to a nurse. As he resigned the case on the the fourth day into Chapman's hands one may question whether the subsequent neglect was not as much attributable to Chapman as to Hills.

The case is instructive from several standpoints. *First.* The plaintiff denied Mr. Jeffries right to employ a substitute in the management of the case, especially one less skilled than himself. *Second.* Whether the careless use of the forceps is not just ground for legal action. We think it is. *Third.* Mr. Hills was somewhat remiss in duty in not carefully closing the perineal tear.

Is it not incumbent upon the obstetrician to promptly discover the extent of this lesion, to confess the same and to attempts its repair by primary union? We think so. It was shown that the plaintiff had greatly suffered in health and in loss of money in consequence of this perineal wound. She was permitted to bear the results of a lesion which might have been corrected if not prevented by skilful treatment. According to the evidence the jury could not do justly otherwise than find for the defendants, but it seems to us at this distance from the case that the plaintiff had good ground for instituting suit for damages.

The Ninth International Medical Congress.—On September 5th, the sessions of the Ninth International Medical Congress will be inaugurated in Washington and during the five or six days succeeding the great event towards which the professional mind in this and other countries has been looking for several years past will be enacted. For over two years past the Congress has been a topic of almost universal discussion in professional circles. Its preliminary organization was made a subject of bitter contention and wide estrangement. The bickerings and animosities engendered by the unfortunate issues raised in connection with the plan of organization first proposed have left unpleasant memories which every true lover of the medical profession must regret. The opinion which we held in regard to this controversy we have had no occasion to change. We believed then as we believe now that the action of the American Medical Association was not only unwise and unjust, but entirely revolutionary. Many others have differed with us in this opinion. As time has rolled on a number of those gentlemen who were opposed to the action of the Association have consented to take part in the present organization. Others have remained inactive and estranged. As the organization now stands it is only fairly well equipped for the work before it next week. Many of the gentlemen entrusted with responsible positions in connection with the sections have been stimulated to unusual effort and have succeeded in drawing around them a large number of contributors to

the work of their respective sections. The programmes of the sections thus far published show that a great many papers will be read. A noticeable fact in connection with the work is the large number of comparatively new men who come to the front as contributors to the various sections. In this respect the west and south-west are quite conspicuous. The managers of the Congress certainly have spared no means to draw out the latent talent of the profession.

It remains to be seen how this work will compare in scientific merit with that of preceding Congresses. Another striking feature is the comparatively few number of names of the recognized leaders of the profession which appear among the lists of contributors. The reason for this we will not undertake to explain, but the fact is noticeable that a great Congress is resting mainly for its support upon the almost undeveloped talent of the profession. A great occasion has been offered for the display of work. Many whose talents are everywhere recognized ignore the occasion and others less known to fame take hold of an opportunity to exhibit their abilities. The future must determine the result of this sparring at the fortunes upon the Congress.

The indications are that the attendance upon the Congress will be very large. The south-west, west and north-west will send a very large delegation. A large number will doubtless attend from the middle states but the amount of lukewarmness in these latter states is very apparent. Quite a large number of prominent and distinguished members of the profession from across the Atlantic will be present and will take part in the work of the Congress.

The social features of the Congress, we understand, will be ample and enjoyable. The local committee in the District has done its full duty and if the profession has liberally contributed of its means, as it should, nothing will be wanting in this respect to make the occasion a happy one to all who are present.

It must be said in justice to the gentlemen entrusted with the management of the Congress that they have worked under most discouraging circumstances; it is to be hoped their efforts will be crowned with success. The Congress should not be regarded as the enclusive property of this party or that party. It should be considered the work of the American profession, and whatever differences may exist as to its past management these should be overlooked in the general desire to make it a creditable gathering of scientific workers. It certainly cannot be what we believe it would have been under its first organization, but it is not too late to make it a representative and influential body of professional workers. We advise all who can to attend the meeting, to contribute to its success and abstract from its deliberations whatever of good there is in them.

THE AMERICAN DERMATOLOGICAL ASSOCIATION.—The eleventh annual meeting of the American Dermatological Association, held in this city on Wednesday and Thursday of the present week, was attended by a number of well-known specialists in this department of medical work. The papers read and the discussions following the same were important contributions to dermatological studies. Whilst the membership of this Association is not large it embraces all the leading American specialists in dermatology, the great majority of whom are widely known for their original work in skin diseases. The Association has taken an active part in the promotion of the highest character of scientific work and ranks with the other special organizations engaged in the development of special work in medicine. In dermatology, as in other branches of medicine, the boundaries of science have been vastly enlarged during the past five years. These advances must be attributed in the largest measure to the influences of the special organizations which have come into existence during that time. It is to classes of specialists in medicine composed of such men as we find in the membership of the Dermatological Association that the profession at large must look in large measure for strictly original work. Broad opportu-

nities are presented to these men for conducting careful investigations and for systematic observations, and much therefore is expected of them. That these men are sensible of the trust imposed on them the results of recent years attest. American Dermatology, certainly, has not been permitted to remain at a stand-still by the Dermatological Association. A glance at the annual work of the Association will soon convince one of the large and useful work these few pioneers in skin diseases have done on this side of the Atlantic.

Whilst the foundation of much of this work was laid abroad where special facilities for the study and observation of skin diseases are immense, it is but just to our American workers in dermatology to state that they have opened up lines of study and have developed resources which reflect the highest credit upon American dermatological work. We believe the time is not far distant when the student of dermatology will look to American workers rather than to foreign fields for what is best and most reliable in this specialty.

Miscellany.

The Value of a Life.—The courts as a rule, fix the value of a person killed by a railroad at $5,000, but vital statisticians place the value of an adult person to the State at $750, and the annual productive power at $95. One-half of all deaths occur during the productive age. The total annual deaths in the United States during this age is 200,000, therefore creating a loss of $150,000,000. There are, also, 1,500,000 persons sick all the time in the United States, causing a loss of $142,500,000.

A large per cent. of deaths is caused by preventable diseases. In view of this fact, can any reasonable person object to any legislation which will tend to secure a reduction of so costly a sacrifice? State and local boards of health are created to this end, but their work must be supplemented by the co-operation of the people.

The relative market value of the different parts of the human body has been calculated by a German mathematician with a view to fix a basis for the award of damages in case of disablement. The loss of both eyes, arms, legs, hands or feet, is put at 100, that of the right hand at 60, of a foot at 50, of the left hand at 40, the right thumb at 33½, an eye at 22, the left thumb or right fore-finger at 14, the left fore-finger at 8, and any other finger of the left hand at 4 per cent.—*Medical and Surgical Reporter.*

The Treatment of Laryngeal Phthisis in the Stage of Ulceration.—Astier gathers the following methods of treatment:

1. For pain,

Ext. opii,	
Ext. belladonn. .	āā gr. 8.

Dissolve in aqua lauro-cerasi. ℥ 5.

Used locally.

Insufflations of $\frac{1}{10}$ of a grain of morphia mixed with starch, as advised by Mackenzie, may be used twice daily; and the dose may be increased to ½ a grain.

Moure employs 5 grains of hydrochlorate of morphine in 15½ ounces of water by spray.

Astier employs the following powder by insufflation:

Plumbi acetat. . .	gr. 30.
Morph. hydrochlorat. .	gr. 3.
Sacchar. lact. . .	℥ 2½.

To be applied after cleansing the mucous membrane by solutions of potassium chlorate or sodium bicarbonate.

2. The ulcerated surfaces may be cauterized by nitrate of silver, galvanocautery, tincture of iodine, or

Iodin.	gr. 5.
Potass. iod. . . .	gr. 45.
Glycerin. . . .	℥ 2½.

Iodoform, in suspension in glycerine, or in powder may be used.

3. If œdema be present, tracheotomy may be necessary.

4. Forced feeding, and preliminary anæsthesia by cocaine, before introducing a stomach-tube, may be needed.

The lactic acid treatment (Krause) consists of the use of solutions of from

10 to 80 per cent. of the acid; from which good results have been obtained. —*Journal de Mèdecine*, July 14, 1887. —*Medical News.*

An Antarthritic Collodion.—Monin is credited by the "Union médicale" with the following formula:

Elastic collodion, Sulphuric ether,	each	15 parts;
Salicylic acid. . .		4 "
Morphine hydrochloride.		1 part.

In cases of gout of the great toe, this should be applied every hour. The pain soon ceases, it is said, the swelling subsides, and metastasis is not to be feared. —*N. Y. Medical Journal.*

A New Test for Milk.—A new test for water—that is, pump water—in milk has recently been proposed by Herr Szilasi. This depends on the fact that sulphate of diphenylamine is colored blue by the action of an exceedingly dilute solution of a nitrate. As well water always contains more or less nitrate, its presence in milk can be detected. The test is carried out thus: Twenty minims of sulphate of diphenylamine is placed in a small porcelain vessel and a few drops of the milk which is to be examined added to it. If this contains even five per cent. of average well water, a blue tinge will gradually distinctly appear. Sulphate of diphenylamine is easily procurable, and only costs about sixpence an ounce, so the test may be readily tried.—*Lancet.*

The Treatment of Diarrhœa by Cannabis Indica.—Drs. Bond and Edwards give the following prescription in the *Practitioner* for July, 1887, which they have found very useful:

℞.—Tinctura cannabis indicæ ♏x.
Liquoris morphinæ ♏v vel ♏x.
Spiritus ammoniæ aromatici ♏xx.
Spiritus chloroformi ♏xx.
Aquam ad ℥j.

To be repeated every one, two or three hours, according to circumstances. Directions: *No food for several hours, but a little brandy and water.* We have not seen one case run on to a fatal issue under this treatment.—*Medical News.*

The Proper Method of Examining the Breast.—Dr. Gross says that, to examine properly a woman's breast, she should be lying on her back. If examined in other position, it can be so manipulated as to convert it into any tumor. When on her back, examine by pressing the tips of fingers back through the breast against the chest walls, and not by pinching the structures up between the fingers.—*College and Clinical Record*, July 1, 1887.

Large Doses of Quinine.—Referring to the claim of Dr. Knight, of Dublin, that the largest dose of quinine ever given was by himself, the amount being 131.25 grains in twenty-four hours, a correspondent calls his attention to the statement in "Stille's Therapeutics," vol. i., p. 497, edition of 1860, that a lady took about ten drachms in a few hours, a man took five hundred and ten grains in seventeen hours, and another took four hundred and eighty grains in a single night.—*Med. Rec.*

Sympathetic Inflammation of the Eyeball.—Gunn ("Roy. Lond. Ophth. Hosp. Rep."), as a result of the analysis of about fifty cases of sympathetic inflammation of the eye under his own observation, draws the following conclusions: 1. It is well to employ mercurials in all cases during the acute stage, from the commencement. 2. When and while the inflammation is of a very severe type, treatment should be merely palliative, and no operative measures are warranted. 3. Cases of moderate severity are best left alone, without operation, for the first six months at least, and then iridectomy may be attempted if the tension is plus and the iris bulged forward. If at the end of a year the tension is about normal, but the pupil excluded, improvement may be expected from a large iridectomy, with extraction of the lens, followed subsequently by division of the lymph and opaque membrane with Weiss's scissors.—*N. Y. Med. Journal.*

Medical Items.

It is estimated that between 300 and 400 foreign delegates will attend the International Medical Congress.

The next annual meeting of the American Gynæcological Society will be held in New York City on September 13, 14 and 15.

Dr. I. E. Atkinson, of this city, has been elected President of the American Dermatological Association for the ensuing year.

There are now said to be 108 women studying medicine in Paris, of which number 83 are Russians, 11 English, 7 French, 3 Americans, 2 Austrians, 1 Roumanian, and 1 Turk.

Prof. Virchow does not hesitate to pronounce the morbid growth removed from the throat of the Crown Prince by Dr. Morrell Mackenzie a simple wart without any cancerous tendency.

The Board of Health of New York City has determined to enforce the law relating to the registration of births in that city, and threatens to prosecute all physicians who fail to report births.

The eighteenth annual session of the Medical Society of Virginia will convene at Richmond, Va., on Tuesday, October 18, 1887, at 3 P.M. A general discussion on "The Choice of Anæsthetics" will be opened by Dr. Hunter McGuire.

The United States Circuit Court has granted a perpetual injunction restraining Gross et al. from manufacturing or selling any medical preparation under the name "bromidia" or any colorable imitation of it.

Two new cases of death from hydrophobia after undergoing Pasteur's treatment are reported. One case died 60 days after being bitten and 45 days after Pasteur's inoculation. The second patient was inoculated by Pasteur two days after being bitten and died five months subsequently with hydrophobia.

The total number of medical students in five Swiss universities during the last summer session was 742, 78 of them being women. Basle has 113, Berne 212 (32 woman), Geneva 115 (5 women), Lausanne 25 (4 women) and Zürich 277 (37 women). Of 78 women only 14 are Swiss (12 at Zürich), the remaining being foreigners, mainly Russians.

Dr. Verrey, of Lausanne, reports a very rare example of primary tuberculosis of the conjunctiva of the right upper eyelid in a girl, aged 14, with a good personal and family history. There was also suppuration of an anterior auricular lymphatic gland on the side of the ulcer. Microscopical examination detected numerous Koch's bacilli in the pus from the gland, and a smaller number in the tissues of the conjunctival ulcer.—*Brit. Med. Jour.*

On Wednesday evening the members of the American Dermatological Association were handsomely entertained by Dr. R. B. Morison, Vice-President of the Association, at his residence on St Paul Street. A large number of physicians and well-known citizens were invited to meet the distinguished Dermatologists. The evening was greatly enjoyed by all who were present.

On Thursday evening the Association was entertained by Dr. I. E. Atkinson, at his county residence in Baltimore County.

The Illinois State Board of Health.—The Illinois State Board of Health did a piece of work at its last meeting which required courage. Under the new law they are permitted to grant licenses to itinerant venders of medicines for a fee of $100 a month. At its meeting there were eight applications for such licenses, backed up by powerful political influence, which would have brought in $800 each month into the board's coffers. They were all denied licenses, however, though to an outsider, it looks like heroic application of the law.—*Sanitary News*, August 13, 1887.

The American Otological Society has elected the following officers for the ensuing year: President. Dr. J. S. Prout, of Brooklyn; Vice-President, Dr George C. Harlan, of Philadelphia: Secretary and Treasurer, Dr. J. B. Vermyne, of New Bedford, Mass.; Representative on Executive Committee of Congress of American Physicians and Surgeons, Dr. C. R. Agnew, of New York; Alternate, Dr. Wm. H. Carmalt, of New Haven. The next meeting of the Society will be held at the Pequot House, New London, Conn., Tuesday, July 10, 1888.

The managers and staff of the Pennsylvania Hospital and many prominent city physicians of Philadelphia gave a reception on Wednesday to the foreign delegates to the International Medical Congress. Among the guests present were : Dr. A. Cordes, the distinguished Swiss surgeon, Dr. A. J. Ourt, Secretary of the State Committee on Lunacy; Dr. Alfred S. Grubb, of the *British Medical Journal*, of London; Brigade Surgeon John Anderson, of London; Surgeon-General Marston, London; Dr. Wm. H. Lloyd, Deputy Inspector General of Hospitals and Fleets; Dr. G. Fielding Blandford, of London; Dr. Leon Le Fort, Professor of Clinics and Member of the Academy of Medicine, Paris; Dr. Joseph Recamier, Adjutant of the Anatomical Section of the Academy of Medicine, Paris; Dr. Tyne, of Austin, Texas; Dr. G. W. Rush, of Paris, Texas; Dr. H. J. Aschenfelter, of Pottstown; Dr. A. H. Halberstadt, of Pottsville; Dr. W. H. Shipps, of Bordertown, N. J.; Dr. John M. Carleson, Claymount, Ill.; Dr. Wm. Murrell, Professor of Therapeutics in the Westminster Medical School of London; Dr. Thos. M. Dolan, Editor of the *Provincial Medical Journal* of England; Dr. J. S. Grant Bey, Representative of the Egyptain Government; Dr. Charles Phillips, Professor of Therapeutics, University Medical School; Dr. Leopold Servais, of Antwerp; Dr. Adair, of Vienna, Austria.

Original Articles.

PRACTICAL NOTES ON DISEASES OF THE RECTUM.

BY S. T. EARLE, M.D.,

Professor of Rectal Surgery in Baltimore Polyclinic and Post-Graduate Medical College.

(*Continued from August* 27, 1887.)

Malformations of the Rectum and Anus.

Malformations of the rectum occur in quite a variety of forms, but I shall here only make such allusions to them as I think will be of practical use to the general practitioner, and refer those who desire a more thorough and detailed description to more complete works on rectal diseases. I shall adopt the classification used generally by authors on the subject, but shall do little more than mention the different varieties and will dwell more at length on the means for correcting them. From a study of fœtal life it has been found that the rectum and anus are formed separately, the former being developed in connection with the abdominal viscera and gradually separates from them, being then only a blind pouch that extends itself down in the direction of the anus; the anus is first observed as a small depression on the posterior portion of the perineum, which gradually deepens until it meets the descending rectum when they coalesce and form a complete termination for the intestinal tract. But either of them may be arrested at any stage of their development, and there may result any one of the many malformations about to be described. There may be a congenital narrowing of either, or of both the anus and rectum; it may be only sufficient to give rise to constipation, or may be so tight as scarcely to admit of the passage of meconium. It is likely to be located near the orifice, and is easily discoverable upon examination, should the symptoms have been sufficiently urgent to attract attention; it is generally annular in form resembling a string tied around the canal, and if sufficiently tight to require interference may be nicked very slightly with a knife on four sides, and the daily introduction of graduated bougies commenced, and continued for sometime. The anus may be closed by a thin membrane, which may be either of skin, or mucous membrane; it varies in thickness, may be so thin as to rupture spontaneously, or it may require a crucial incision to remove the obstruction, in which case the remains are readily absorbed. It may be said never to be sufficiently thick to prevent its being bulged out by the meconium from above, and thereby avoids the risk of being confounding with entire absence of the anus now to be described. In this malformation the rectum ends in a blind pouch at various distances from the perineum, which, however, is not great; there may exist only a slight depression on the perineum where the anus should be, or an entire perineum. After first ascertaining whether or not the rectum has some abnormal outlet through the bladder, urethra, or vagina, you can proceed to locate the rectal pouch by the following means: by auscultation with a stethescope over the perineum while percussion is made over the abdomen, titillation of the perineum to excite efforts at defecation; or, if a female, by introducing the little finger into the vagina and feeling for it. The anus may be normal, but the rectum partly deficient, having a larger or smaller space intervening; the septum is likely to be thin and easily punctured, or if the space is more extensive, having the anal depression as a guide it will not be very difficult to reach the rectum; the danger lies in the likelihood of the abnormality being overlooked from the presence of the anus. The anus may be absent and the rectum open abnormally into the bladder, urethra, vagina, or at some abnormal point on the perineum, or in the sacral region. If it opens into the bladder it is diagnosed by the presence of meconium in the urine; this is more common in males and is likely to give rise to cystitis; when into the urethra the meconium is likely to escape independently of the urine; when into

the vagina, and if the opening is of good size, the prognosis is more favorable; women have been known to live to old age with this abnormality and perform all the duties of wives and mothers without knowing it existed. When the opening is at some abnormal point in the perineum, or in the sacral region, it is likely to be long, narrow and fistulous in character. The rectum and anus may be perfect, but the ureters, uterus, or vagina open into the rectum. There may be entire absence of the rectum, which differs from the variety described above as "partial absence of the rectum" in the amount that is deficient; in this case the rectum either hangs loosely as a blind pouch in the abdomen, or pelvis, may form attachments, or be continued as a fibrous cord to the site of the anus. There may be an entire absence of the large intestine which is also generally attended by the absence of the anus, the small intestine in such a case generally opens at the umbilicus. The course to be pursued in the treatment of these cases should be prompt and decisive. In passing I have recommended what had best be done for the first two conditions directly after describing them; the recommendations are easily accomplished and are generally followed by good results. In those cases where the anus is complete, but there is a slight deficiency in the length of the rectum and where there is but a small space intervening, a crucial incision with subsequent dilatation by bougies may be all that is needed. But when there is an entire absence of the anus, or where the rectum opens by a long fistulous outlet at one of the abnormal points above mentioned, the treatment is much more difficult. It would at first be advisable to make an exploratory incision directly in the median line of the perineum where the anus should be, in the case of imperforate anus, but on no account is it admissible to plunge a trocar and canula through the perineum in search of the rectum as formerly recommended, for fear of injuring other pelvic organs, as the bladder, or what is much more likely and serious, puncturing the peritoneum. If the exploratory incision throws no light upon the case it would be very advisable to stop and consider the very small space in which you have to work before proceeding further. According to Bodenhamer (see Kelsey on Diseases of the Rectum, page 45) the normal measurements on two new born well developed male children at full term were as follows: First case, from one tuberosity of the ischium to the other, one inch and one line. From the os coccygis to the symphysis pubis, one inch and three lines. From the os coccygis to the promontory of the sacrum, one inch and three lines. In the second case in the order in which they were taken in the first case, as follows: "one inch, one inch and one line and a half, one inch and two lines." The next step in the operation is to extend the exploratory incision in the median line to the scrotum anteriorly and the coccyx posteriorly, then dissect down carefully taking care to deepen the incision in the direction of the hollow of the sacrum, until the rectal pouch is reached, when it is to be opened longitudinally and the meconium allowed to escape. As an additional precaution during the dissection a sound should be introduced into the male urethra, or the vagina. Formerly this completed the operation, except that bougies were used for some time subsequently to dilate and keep the passage thus made. But this was found to be inadequate to meet the necessities of the case for any length of time, on account of the constantly recuring tendency of this artificial canal to contract and give rise to fæcal accumulation, etc. Amussat subsequently made two important additions to this operation which answered admirably, filling nearly all the requirements of the case. In the first place he advised the artificial anus to be made either directly at the point of the coccyx, or after excising that bone, to make the anus occupy its place; secondly that the rectum be drawn down and its walls stitched to the sides of the opening. The first procedure has the effect of shortening the distance through which the rectum has to be extended, and also

facilitates the finding of the rectal pouch, the second avoids all risk of subsequent stricture. The operation is known as Proctoplasty. It will not answer, however, is those cases where the rectum is very high up in the pelvic cavity, or where there is an entire absence of the rectum, and these two conditions offer still more serious objections to its performance, if the rectum has also formed adhesions. In these latter conditions relief is to be obtained by inguinal, or lumbar colotomy, the formula of which seems of late years, and under the successes of antiseptic surgery, to be preferred, because the sigmoid flexure of the colon is much more easily found in this locality than the descending colon is in the loin, and because the artificial anus is much more easily attended to by the patient. The operation of colotomy will be described under another head.

(To be continued.)

PRACTICAL NOTES ON MEDICAL SUBJECTS.

BY GEORGE J. PRESTON, M.D.,

Professor of Practice of Medicine in Baltimore Polyclinic and Post-Graduate Medical College.

(Continued from last issue.)

II. General Measures.

When valvular disease has declared itself certain general directions should be given the patient as to his mode of life, diet, etc.

As to climate little can be said. Extremes, both of heat and cold are to be avoided if possible. Russian physicians have observed that their patients affected with heart disease bear the hard winter of that climate badly,and send them, when possible, to milder regions. Pure, highly oxygenated air is a desideratum.

In many instances it will be necessary to insist upon the patient changing his occupation. Any labor which demands sudden exertion, as lifting heavy weights, using heavy hammers, and especially exertion with the arms above the head, should be discontinued. Continuous maintaining of the erect position is to be avoided, since, according to Pascul's law, the hydrostatic pressure is thus favored and, in case of aortic regurgitation, the dilating force increased. The subject of heart disease should accustom himself to do nothing in a hurry; when in the recumbent position he should always rise gradually to the erect one, and not by a sudden bound which subjects the heart to a dangerous strain. Frequent rest is beneficial, and should be obtained several times a day, and the hours of repose in bed should be long. Mental quietude is of no less importance. All kinds of intense excitement, whether in the line of business or the pursuit of pleasure should be prohibited. Without doubt many cases of valvular disease have received irreparable injury by a series of anxious days on 'change.

The diet it these cases is very important. It is obvious that the blood, which circulates in less quantity, should be of good quality. The slop diet of the old practitioners in cases of valvular disease with hypertrophy, seems to us now a sort of cruelty to an organ that needed all the nutrition that could be given it. Whenever in the course of a compensating hypertrophy a period of weakness comes, that is a time of great danger, and should be carefully guarded against by nutritious, easily assimilable food. Such materials, which in the process of digestion are liable to evolve gas, as the starches and sugars, should be avoided. Over distention of the stomach either by food or drink is hurtful. The meals should be taken more than three times a day, and only moderate quantities ingested at a time.

Attention to the various excretions is important on account of the general tendency to congestion. The bowels should be kept open, a free flow of urine encouraged, if necessary by mild diuretics, and the skin maintained in good condition by occasional tepid baths. These details may appear trifling but it is attention to just such minutia that brings success. In certain cases where the compensation is perfect, and the balance not easily dis-

turbed, systematic exercise, of not too violent a nature may prove beneficial. Oertel advocates very strongly mountain climbing. In regard to exercise the golden rule is, never to continue it to the line of exhaustion; the patient should be told to stop always, before fatigue comes on.

The question sometimes comes up, as to whether a person affected with chronic valvular disease should marry. This depends a good deal on the individual case, and it is the duty of the physician to state plainly the risks that would be incurred, though after all his advice is not apt to prevail.

MEDICINAL TREATMENT.

For all practical purposes it will be necessary to speak only of the left side of the heart, for the affections of the right side are in most part secondary to disease of the aortic or mitral valves.

In stenosis it is clear that the hypertrophy which accompanies it is the conservative effort of nature to render the heart muscle strong enough to force the blood through a narrowed aperture.

In incompetence, the hypertrophy is an attempt to render safe the necessary dilatation; to preserve the proper muscular thickness of the walls of the enlarging cavity, which without this safeguard would become too thin to sustain the pressure brought to bear upon them.

The central idea in the treatment of valvular disease may be expressed in the one word, *equilibrium;* and a very important principle is: *Never interfere so long as the equilibrium is maintained.* Just so soon as careful observation detects failure of compensation interference is imperatively demanded, and we should never cease our efforts to restore this lost balance. It is very evident that harm may be done by employing a cardiac stimulant when the condition nearly approaching to over-stimulation obtains, no less than by withholding this assistance when it is needed.

Among the various classes of drugs, the one which most nearly meets the requirements is the digitalis group, so-called from its most important member. For a long time digitalis stood alone, but lately many valuable additions have been made to it. Of these agents, besides digitalis may be mentioned *strophanthus, convallaria, caffein, adonidin, spartein, enonymin* and a number of lesser importance. According to Fraser these substances all act upon the heart, and increase its action by increasing the strength of its contractions, particularly of the ventricles. Some authorities hold that their action upon the heart is exerted through the nerve connections, others assert that the principal action is upon the muscle itself. Their action is followed by increased blood pressure, brought about by the increased strength of the heart's contractions, together with a special action on the blood-vessels, due either to action on the vaso-motor center, or the vessels themselves. It will be well to consider the individual action of some of these substances, together with their special therapeutics.

Digitalis.—Through the labors of Bernard, Pelikan, Dybkowsky, and Wood, the physiological action of digitalis has been very carefully worked out.

In brief it may be said:

1st. To stimulate the heart muscle itself, thus bringing about stronger and more complete contractions, and 2nd. To cause contraction of the arterioles, in some manner not yet definitely ascertained though probably by a combined action on the coats of the vessels and the vaso-motor center; as a consequence of this latter action there is increased tension.

The strong contractions produced by digitalis steady the pulse and give it more force, and, in addition, this action of the drug is very beneficial to the heart itself, inasmuch as all the used up venous blood is squeezed out. Digitalis then is emphatically a heart tonic. Owing to its increasing arterial tension a decided diuretic action is obtained.

The condition in which it is most useful is *mitral regurgitation.* The increased force of the systole drives more blood proportionately through the large aortic opening than through the small

aperture left unclosed by the imperfect mitral leaflets. Wood says, "As the force or rapidity of the current increases under the action of digitalis, the friction becomes greater at both orifices, but the ratio of increase is evidently far higher in the small choked mitral leak, than in the wide aortic opening, hence the large orifice constantly gains upon the smaller as the cardiac force is increased, and more blood passing into the systemic circulation, the pulmonic is relieved." As noted by Oliver the circular fibres around the mitral valve are stimulated, and in this way it is not improbable that digitalis really lessens the size of the aperature.

In *mitral stenosis* there is more time allowed for the blood to pass through the narrow aperture during the diastole, and which is occasioned by the use of digitalis; moreover the auricle is stimulaled into more forcible contraction.

In *aortic stenosis* digitalis occasions stronger contraction of the ventricle, thus forcing more blood, which is raised to a high tension, through the constricted opening.

In *arotic regurgitation*, the tendency to sudden distention is in some measure obviated by the use of the drug.

In all of these conditions the therapeutic indications before mentioned must be carefully weighed before beginning the use of digitalis. In mitral regurgitation where dilitation is progressing, the pulmonic circulation much embarrased and heart failure imminent it should be used boldly, and the result is often truly astonishing. There has been a good deal of discussion as to the advisability of employing digitalis in aortic disease. When there is what Fathergill calls "massive hypertrophy" its use is manifestly injurious, but when for some reason the strength of the heart begins to fail and dilitation is gaining on hypertrophy its cautous use, in small doses is of very great advantage. In the latter stages of aortic regurgitation when the heart's walls are very thin, and there is mural decay, it must be employed with great care. When the flow of urine is increased by the administration of digitalis it is evident that a good effect is being produced, but when it is diminished the drug must be watched.

A bad omen is the necessity for largely increasing the dose to produce the desired results. The two principal objections to the use of digitalis are its action and the unpleasant effect produced on the stomach. As regards the first, this has been too strongly urged. It will often be found that where the drug is needed and is doing good, and where it is given in regular and moderate doses, that a patient will be able to take it for weeks, and months without any bad result. The second objection is unfortunately more important; the depression sometimes occasioned by the nausea and gastric derangement will more than counterbalance the good effects. Another point is that in some conditions the action of digitalis on the arterioles is undesirable.

As to its administration, the dose must in all cases be regulated by the effect produced. The leaves may be given in doses of gr. i and upwards; a very useful combination is with the squill and reduced iron. The infusion will often be found to agree well with the stomach, though not reliable as the tincture. Digitalin, the active principle has not found much favor; its dose is gr. $\frac{1}{50}$.

(*To be continued.*)

Correspondence.

THE CASE OF ROSS THE "BURKER."

ELLICOTT CITY, MD.

Editor Maryland Medical Journal:

DEAR SIR.—Ross the so-called "burker" having been temporarily reprieved by our Governor because of traces of imbecility having been discovered by a member of our profession, the case presents itself in an aspect interesting from a medico-legal standpoint, for the reason that if Ross be found feeble-minded by an inquiry upon his mental

condition we have ready furnished an additional loop-hole for criminals to escape the just punishment of their crimes. Insanity has been a plea by which many deserving criminals have escaped the death-penalty, and while philanthropy may urge the abolishment of such penalty, have we not already sufficient means for ready witted lawyers to puzzle and convince juries by reasonings which act by *contre-coup* without the medical profession furnishing further grounds, by which crime in protected and the profession itself made weaker in the court-room where it should reign supreme? I do not mean to contradict Dr. Morris, neither do I doubt his evident sincerity, and with his other medical brethren, I entertain the highest regard for him as a gentleman and ripe scholar, yet with all due deference to his ability, I beg leave to present a few points, suggested by my experience with the feeble-minded, which point to Ross's entire accountability for his crime.

1. The evidence points towards a carefully prepared and premeditated plan in killing the Brown woman; an imbecile acts from impulse only, and rarely has a desire to injure persons.

2. There are few if any cases upon record where an imbecile has suddenly committed so revolting a crime, for so evident consideration, (money) without having evinced at some previous time a like criminal tendency.

Has Ross in anyway ever shown any other criminal tendencies, save those which anyone with the previous association with pseudo-criminals might show? He is illiterate, coarse and brutal, as hundreds of colored men and women, whose education is limited, and who have had neither the advantages of the school and church, yet his vote has never been challenged, and he has not caused remark by behavior different from his immediate associates.

3. Seguin long since said that it was hard to draw a line between the higher grades of the feeble minded and those supposed to be normal, and it is just as difficult to-day.

Unless Ross is an evident imbecile, it would be easy to find enough like him to puzzle the State to take care of.

4. An imbecile rarely if ever comes under a sudden religious enthusiasm such as Ross has experienced, remaining deaf to prayer and entreaty, or if an enthusiast in religious matters shows it at an earlier period of life, and under circumstances of association such as Ross has not had.

I have a man under my care at the present time, who for years has been a communicant member of the Episcopal church, who seems to thoroughly understand the tenets of his religious sect, who reads and ponders in his way, upon the bible, yet if he becomes enraged at anything he will pour forth a volume of profanity which would cause a professor of the art to blush for shame.

Ross is voluble in his new found happiness; it has become the most prominent as well as the most digusting result of the notoriety afforded criminals about to suffer the death penalty; and this in itself varies from the average imbecile, who if a profound egotist, as many are, will show evident signs of mental weakness, but if otherwise, he will be of a retiring disposition and averse to showing himself to the curious. Ross may be an imbecile, and I should hesitate to assert positively that he was not, without better evidence than my own judgement, for fear he might be punishable for a crime for which he was not accountable, or that he was, lest in the future cause be given for accountable criminals to escape the only means now in our hands to mete them justice due there crimes.

SAMUEL J. FORT, M.D.,

A MIXTURE FOR INFANTILE DIARRHOŒA.—The "Union médicale" credits Zinnis with this formula:

Fennel-water.	.	75 parts;
Lime-water.	. .	6 "
Subnitrate of bismuth.	.	3 "
Syrup of orange-flowers		15 "

A teaspoonful is to be given every two hours to infants whose dejections are green and contain masses of undigested casein. Farinaceous food should be with-held.—*N. Y. Medical Journal.*

Society Reports.

NINTH INTERNATIONAL MEDICAL CONGRESS.

HELD IN WASHINGTON D. C., SEPTEMBER, 5TH, 6TH, 7TH, 8TH, 9TH AND 10TH.

(*Specially Reported for the Maryland Medical Journal.*)

MONDAY.—FIRST DAY.

The Ninth International Medical Congress began its sessions on Monday, September 5th, at 11 o'clock A. M., in Albaugh's Theatre, Washington, D. C. The doors of the theatre were opened at 10 o'clock, and between that hour and the hour named for the opening of the Congress the building was packed with physicians from all parts of America and Europe. A number of ladies and distinguished civilians occupied seats in the house, whilst the isles and galleries were packed to overflowing with the large assemblage of delegates.

Promptly at 11 o'clock Prof. Henry M. Smith, of Philadelphia, chairman of the Executive Committee, called the Congress to order. In a few appropriate words he introduced President Cleveland, who stepped to the foot of the stage and said the following:

PRESIDENT'S ADDRESS.

I feel that the country should be congratulated to-day upon the presence at our capital of so many of own citizens and those representing foreign countries who have distinguished themselves in the science of medicine and are devoted to its further progress. My duty in this connection is a very pleasant and a very brief one. It is simply to declare that the Ninth International Medical Congress is now open for organization and for the transaction of business.

President Cleveland's remarks were received with loud manifestations of approval.

PERMANENT OFFICERS OF THE CONGRESS.

Prof. Smith next put in nomination Dr. N. S. Davis, of Chicago, for Permanent President of the Congres. This motion was made unanimous by a loud applause. Dr. John B. Hamilton, Supervising Surgeon-General of the U. S. Marine Hospital service, was next elected Secretary-General.

Dr. Hamilton then read the list of Vice-Presidents and other officers of the Congress, all of whom were elected.

The following are the names of Vice-Presidents.

United States. — Surgeon-General Moore, of the Army, and Surgeon-General Gunnell, of the Navy (ex-officio); Dr. William Brodie, Detroit; Dr. W. W. Dawson, Cincinnati; Dr. A. Y. P. Garnett, Washington; Dr. Edward M. Moore, Rochester; Dr. Tobias Richardson, New Orleans; Dr. Lewis A. Sayre, New York; Dr. Joseph R. Smith, New York; Dr. J. M. Toner, Washington.

London.—Dr. Cuthbert H. G. Bird, Dr. A. Pearce Gould, Mr. Ernest Hart, Dr. Jonathan Hutchinson, Sir James A. Hambury, Sir William Jenner, Dr. Fred B. Jessett, Dr. William H. Lloyd, Dr. William Murrell, Dr. Jeffrey A. Marston, Mr. Thomas J. MacLargan, Dr. John Marshall, Dr. Morrell Mackenzie, Dr. William A. MacKinnon, Dr. Charles D. F. Phillips, Dr. Richard Quain, Sir John W. Reed, K.C.B., Mr. William H. Savory, Sir Edward H. Seiveking, Dr. John Tweedy, Sir Henry Thompson, Sir William W. Gull.

England.—Dr. J. Ewart, Brighton; Sir E. Walter Foster, Birmingham; Sir Thomas Longmore, Netley; Dr. John D. McDonald, Surrey; Dr. John Withers, Brighton; Sir William Roberts, Manchester; Dr. John B. Sanderson, Oxford; Mr. Lawson Tait, F.R.C.S., Birmingham; Sir John Tomec, Surrey; Dr. George M. Humphrey, Cambridge.

Scotland. — Dr. McCall Anderson, Glasgow; Dr. Thomas Annandale, Edinburgh; Dr. John Chieve, Edinburgh; Dr. T. R. Frazer, Edinburgh; Sir Douglass Maclagan, Edinburgh; Dr. George H. B. Macleod, Glasgow; Sir William Turner, Edinburgh.

Germany.—Dr. William Coler, Berlin; Dr. Frederick Esmarch, Kiel; Dr. A. L. Gurseron, Berlin; Dr. W. D. Muller, Berlin; Dr. Carl Von Moseng-

sill, Bonn; Dr. G. Unna, Hamburg; Dr. Waldeyer, Berlin; Prof. E. Winckel, Munich.

France.—Dr. Dujardin Beaumetz, Paris; Prof. A. Charpentier, Paris; Dr. A. Chervin, Paris; Dr. Valin, Paris; Dr. Leon Sable, Paris.

Austria.—Prof. Carl Braun; Dr. Wenderfer Wren; Dr. Hans R. Von Hebra, Vienna.

Switzerland.—Dr. F. Dumont, Berne; Dr. Theo. Kocher, Berne.

Italy.—Dr. Francesco Durante, Rome; Dr. O. Morisani, Naples; Dr. Mariano Semmola, Naples.

Egypt.—Dr. J. A. S. Grant, Bey Cairo.

Halifax.—Dr. Thomas M. Dolan.

Ottawa.—Dr. Q. A. Grant.

Havana.—Dr. Nicholas Jose Gutierrez.

Copenhagen.—Dr. Wilhelm Meyer.

Honolulu.—Dr. John S. McGrew.

Belgium.—Dr. Leopold Servais, Antwerp.

Dublin.—Sir. William Stokes.

East Indies.—Dr. George J. H. Evatt.

Hague.—Dr. J. E. de Virij.

The other officers are as follows: Associate Secretaries Drs. William B. Atkinson, of Philadelphia, and George Bird Harrison, of Washington; Treasurer, Dr. E. S. F. Arnold, of Newport, R. I., Dr. Richard J. Dunglison and Dr. Henry R. Smith, both of Philadelphia, Chairman of the Finance and Executive Committees, respectively.

Dr. Hamilton announced that the organization of the Congress was complete.

READING REPORTS.

Secretary-General Hamilton then read his report. He said it was now a matter of history that in May, 1884, the American Medical Association met in the U. S. Capital and passed a resolution inviting the Congress to honor America by holding its next session in the United States. At the meeting in Copenhagen when the question came up for disposition Washington was selected. The committee having borne the invitation and secured its acceptance returned home, and immediately began the work of organization. Shortly before the meeting of the American Medical Association in New Orleans in May, 1885, the preliminary organization was completed. But it transpired that this committee was unable to form an organization satisfactory to the majority of the members of the Association and after some discussion a resolution was adopted which authorized the appointment of additional members of the committee so as to include in accordance with our American system of representation, one member from each State and Territory, and to these were added one representative from each of the three public medical services. The enlarged committee met in Chicago and a majority of the first committee was present and acted harmoniously with the new committee. In a short time, however, the members of the original committee withdrew and the management was thus deprived of their valued service. The committee had, therefore, to contend against more than ordinary difficulties attending so great an undertaking. He complimented Prof. Smith and the members of the committee on their zeal and industry, and announced that there was no unfinished business on the secretary's table. The Congress gave some expression of its appreciation of the committee's work by long and hearty applause.

THE SOCIAL PROGRAMMEE.

Dr. A. Y. P. Garnett, chairman of the Committee of Arrangements, announced the social programme, which has been published in a previous issue of the JOURNAL.

ADDRESS OF WELCOME BY SECRETARY OF STATE THOS. F. BAYARD.

Mr. Bayard said:

Gentlemen of the International Medical Congress:—The pleasing duty has been assigned to me of giving expression, in the name of my fellow-countrymen, to the gratification felt by us all that you should have selected this Capital to be the scene of your ninth

Congress, and cordially bid you welcome.

The world is becoming better acquainted; social assimilation has progressed; small provinces and minor kingdoms are federalizing into great empires; international intimacy suffers less obstruction; the broad and powerful current of literature is silently wearing away the banks of geographical prejudice, and a spirit of a common brotherhood, of mutuality and interdependence is expanding itself irresistably over the barriers of mountain and sea; and these new and beneficent conditions give promise that the word "stranger" shall soon be obliterated from the vocabulary of civilizations.

You, gentlemen, will not, I hope, feel—and I am sure you will not be considered by us—as strangers in the United States; for not only has the fame of many of your number—whom to name might seem invidious—long since surpassed the limits of your own lands and been recorded in the world's annals of scientific attainment, but I take leave to say that here especially will your claims for public respect and grateful acknowledgment, due to your enlightened services, find prompt and hearty allowance by the populations who dwell amid the blessings of civil and religious liberty beneath the broad banner of these United States.

If letters be a republic, science is surely a democracy, whose domain is penetrated and traversed by no royal road, but is open to all sides and equally to all who with humility and intelligence shall watch and wait for light as it is gradually disclosed by Divine Providence for the amelioration of mankind.

In this democratic Republic the brotherhood of science can best realize its universality; for here you will find institutions for the promotion of science in every department, and in none more conspicuously than in that of medicine and surgery, the most important of which are the voluntary gifts of private citizens, men who, in the great majority of cases, were painfully limited in their associations with science and letters, who began life at the lowest round of Fortune's ladder; but, thanks to the noble equities of our political system, rose without "invidious bar" to the highest level of material success and public usefulness.

The public spirit and benevolence of such individuals is due the endowment, and on a scale that princes may envy but have never surpassed, of schools of science, colleges and universities, open for the intellectual training and advancement of all who desire to share and are competent to receive such benefits.

Your Congress is held, gentlemen, in the closing year of the first century of our national existence, and what has been here accomplished in the line of scientific edification and equipment owes comparatively little to systems of prescriptive privilege, but to individual energy, enterprise and generosity we owe what under God we now possess of such things, and non-interference by the Government has proved a promotion and not a hindrance in our advancement. Busy in every department of industrial pursuit, engrossed with diversified occupations, and hurrying with a breathless energy that has left its traces upon the physiognomy of our people, yet, believe me, we are not deaf to the calls of humanity nor lacking in appreciation and grateful respect for the votaries of science.

We welcome this Congress as guardians of the sanitation of the nations. In your profession we recognize the noblest school of human usefulness, and in the progress of the development of the laws of cure, the mitigation of suffering, the prolongation of human existence and the efforts to discover the the true principles and conditions by which life can be made "worth living," we have learned to appreciate our debt to those whose highest reward is the "still small voice of gratitude" and consciousness of benefaction to the human race. Gentlemen, I confidently promise your convention a worthy audience—not alone the members of your profession here assembled nor the limited number whom this building can contain, but that vaster audience to whom, upon the

wings of electrical force, your message will be daily borne far and wide to the listening ear of more than sixty millions of American citizens.

Sure am I that your message will be worthy, and equally that your thoughtful deliverances will be welcomed by a continent.

The closer relations of mankind which modern invention has induced has been necessarily accompanied by an increased dissemination of disease, and the need is obvious of frequent international conference that, in the grand sweep of scientific observation, new discoveries in the healing art may be promptly tested and applied in counteraction.

Forgive me if, as one of the great army of patients, I humbly petition the profession that in your deliberations Nature may be allowed a hearing when remedies are proposed; that her *vis medicatrix* may not be omitted in computing the forces of cure, and that Science may be restricted as often as possible to sound the alarm for Nature to hasten, as she surely will, if permitted, to the defense of the point assailed.

My duty is very simple, and I fear I have already overstepped its limit, for there was indeed little more for me to say than to repeat the words of an ancient dame whose cottage was close by the battlefield of Waterloo, and, being somewhat deaf and hearing the sound of the artillery when the famous "pounding" was hardest, thought she heard some one knocking at her door, and simply said "Come in!" This may may seem an unscientific illustration of auscultation and percussion, but you need not make half the noise of Wellington or Bonaparte, and I can assure you the American people will hear you and heartly say to you, as I do for them, "Come in!"

REPLIES TO THE ADDRESS OF WELCOME.

At the conclusion of Mr. Bayard's remarks Dr. Wm. H. Lloyd, Inspector General of H. B. M. Navy acknowledged the welcome extended to Great Britain and Ireland. He said:

Mr. President: I arise to perform the agreeable task which has been allotted to me of returning thanks on the part of the medical profession of Great Britain and Ireland, as represented by my professional brethren and myself now present at this Congress, for the warm and eloquent address we have just heard from the Honorable Secretary of the State of the United States. It is with great diffidence I rise to perform this task in the presence of the eminent men of world-wide reputation in medical science, who are now present among the English members of the Congress, and I could not have felt justified in undertaking it did I not know that my selection for the task is due to my official position as representing one of the public services of Great Britain. I have now to express our warm thanks and appreciation of the kind and cordial welcome we have received from the Congress, and the honor conferred by the presence and approval of the high officers of state of this truly great country.

Dr. Leon Le Fort, of Paris, on behalf of France said:

"*Mr. President and Mr. Secretary of State:* I appear in the name of my countrymen to thank you for your welcoming words. We have crossed the Atlantic to bring to our American colleagues the testimony of our sympathy. The reception which was accorded us in Philadelphia has proved to us that we can count upon theirs. In designating Washington for the session of the International Congress the physicians of Europe desired to affirm their high esteem for the American medical profession. This is not the time to recall the progress for which we are their debtors, but we may recall that it is to America that we owe one of the greatest of modern scientific discoveries, *l' anæsthesia.* With it, pain is not only suppressed, but operations have been rendered possible which, without it, would be impracticable. The Congress of Washington will be worthy of those who have thus contributed to the progress of science. Consent, Mr. President and Mr. Secretary, to accept the respect and the thanks of the French physicians present at the Congress.

ITALY'S RESPONSE.

Senator M. Semmola, of Italy, said he was happy to have the honor of replying in the name of Italy and of bringing the salutations of his young and great nation, which regards with profound interest the marvelous growth of this edifice of independence—the United States. "I feel it a duty," he said, to "thank you for the welcome so amiable and heartfelt which you have accorded my confreres and me. Such a welcome, indeed, we could not fail to receive from a people noted not only for intelligence and industry, but with whom hospitality goes hand in hand with nobility and generosity of heart. I believe International Congresses to be incontestibly one of the best means of binding people together in liberty, equality and fraternity. But of all the International Congresses in which I have had the honor of representing Italy, I believe that of Washington will exert the greatest influence, for the reason that it takes place on the loved land of independence; and it will, I flatter myself, give a most striking example of the invincible power of humanity, marching with science allied to liberty, toward the great mark of the union of social peace, which was inspired in the United States and which will always be the most shining mirror of the patriotism of this great people."

A RESPONSE IN GERMAN.

Dr. P. G. Unna, of Hamburg, returned thanks on behalf of his German colleagues, for the very friendly words with which they had been welcomed. The German physicians who had come to the United States, had been most handsomely received. Not only had they found in all parts of the country men educated in German colleges in all the branches of medical science, but they had learned with pride that here German science was appreciated and that here it had gathered a rich harvest. He begged to convey the assurance that the German members of the Congress would do their best to make the meeting a success.

RUSSIA'S ADDRESS.

On behalf of Russia Dr. Charles Reyber said: "I would not dare to speak here," "if it were not my duty to do so. I would not be understood if I spoke in Russian, and, not knowing the English language well my position is almost the same if I attempt to speak in English. Therefore, allow me to be brief. I and all who come with me see and learn much, but we have seen and learned far more than we had hoped. Allow me to express my thanks for it, and if I were authorized by my government I have no doubt but that I could also officially express its thanks."

PRESIDENT'S ADDRESS.

Dr. N. S. Davis, President of the Congress, next delivered a lengthy address which was received with loud applause.

At the conclusion of the address by Dr. Davis, President Cleveland and Secretary Bayard advanced and shook hands, offering their congratulations. A vote of thanks was also extended to Dr. Davis. The Congress then adjourned until 11 o'clock A.M., on Tuesday.

WORK IN THE SECTIONS.

Upon the adjournment of the general session of the Congress the members repaired to the various halls set apart for sectional work.

The Section on General Surgery was called to order by the President, Dr. William T. Briggs, of Nashville, Tenn. Papers were read on "Abdominal Surgery" by Charles T. Parkes, of Chicago, and on "Intestinal Surgery" with demonstrations of specimens and new operations by Nicholas Senn, of Milwaukee, Wis. There were between four and five hundred surgeons present during the reading of the papers.

Dr. J. J. Chisolm, of Baltimore, President of the Section on Ophthalmology, called that section to order. The following papers were read: "Eye Troubles in their Relation to Occipital Disease," Dr. A. Mooren, of Duseldorf, Germany; "Pathological Changes in the

Retinal Vessels." Dr. Ole Bull, of Christiana, Sweden; "Hot Water in the Treatment of Eye Diseases," Dr. Leartus Connor, Detroit, Mich. Discussions on these papers were participated in by Dr. Abadie, of Paris; Dr. Holtz, of Chicago; Dr. Calhoun, of Atlanta, Ga., and Dr. Power, F.R.S., of London.

The Laryngological Section was opened by its President, Dr. W. H. Daly, of Pittsburg. Papers were read as follows: "A Contribution to the Cause of So-called Hay Fever, Nasal Asthma and Allied Affections, Considered from a Clinical Standpoint," Richard H. Thomas, of Baltimore, Md.; "Hay Asthma," I P. Klingensmith, of Blairsville, Pa.; "Some Remarks on the History of Rhinology," D. N. Rankin, of Allegheny, Pa.

Dr. A. R. Robinson, of New York, presided over the Section on Dermatology and Syphilography. The following papers were read: "Vaccination During the Incubation Period of Variola," William Welsch, of Philadelphia; "Rectal Alimentation in Diseases of the Skin." J. V. Shoemaker, of Philadelphia; "On the Occurrence of Ulcers Resulting from Spontaneous Gangrene of the Skin during the latter Stages of Syphilis and their Relations to Syphilis," Herman Klott, of New York.

An address from the President, Dr. J. B. Andrews, of Buffalo, N. Y., opened the Section on Psychological Medicine and Nervous Diseases. The papers read were as follows: "Distribution and Care of the Insane in the United States," J. B. Andrews, Buffalo, Superintendent New York States Asylum for the Insane; "Remissions and Intermissions of Insanity," Daniel Clarke, Superintendent Asylum for the Insane, Toronto, Ont.; "The Religious Delusions of the Insane," Henry M. Hurd, Medical Superintendent of the Eastern Michigan Asylum, at Pontiac; "On the Modes of Providing for the Insane in Great Britain and the United States, and on the 'Rapprochment' between American and British Alienists as to the Employment of Mechanical Restraint," D. Hack Tuke, F.R.C.P., Hanwell, England.

In the Section on Public and International Hygiene, an address on the general subject of Hygiene by its President, Dr. Joseph Jones, of New Orleans, was the only subject considered, aside from reports of committees.

The Section on Otology was called to order by Prof. S. J. Jones, of Chicago, who gave a brief history of the progress made in otology in the last twenty-five years, its present state and its relation to general medicine. The papers read were as follows: "A Statistical Report of 5,700 Cases of Ear Disease," Dr. S. S. Bishop, Chicago, Ill.; "The Treatment and Bacteriology of Aural Furuncles," Dr. B. Loewenberg, of Paris; "The Cause and Treatment of Aural Furuncle," D. L. Turnbull, of Philadelphia. These papers were fully discussed by members in attendance from Europe, as well as from America.

An address by the President, Dr. De Laskie Miller, of Chicago, opened the meeting of the Section on Obstetrics. Papers were read as follows: "Vicarious Menstruation," Duncan C. McCallum, M.R.C.S., of Montreal, Canada; "The Mechanics of the Delivery of the Child's Head by Forceps, with Description of the New Normal Forceps," Professor Lazarewitch, St. Petersburg, Russia; "Contraction of the Uterus," Dr. J. Braxton Hicks, of London. (Read by Prof. Earle, of Chicago, Dr. Hicks not being present.)

The Section on Dental and Oral Surgery was called to order by Professor Johnathan Taft, of Cincinnati, who delivered an address reviewing the history of dentistry in this country.

A paper was read on "Chronic Pyæmia," by B. J. Gorre, of Cincinnati.

The Section on Medical Climatology and Demography was opened by its President, Medical Director Albert L. Gihon, of the Navy, who called upon Vice-President Peter H. Bryce, of Toronto, Canada, to preside while he read his opening address "On the Domain of Climatology and Demography as Dependencies of Medicine." The next paper read was by Dr. George H. Rohe, of Baltimore, "On the Meteorological Elements of Climate and Their Influences on

Health," and this was followed by a paper on "The Importance of the Study of Climatology in Connection with the Science of Medicine," by Dr. William Thornton Parker, of Newport, R. I. Among the distinguished foreigners on the platform was M. Joseph Korosi, Director General of Statistics of Hungary. Dr. Sternberg, of the Army, came in late, having just arrived from Rio de Janerio, Brazil, where he has been investigating the yellow fever preventive methods of Domingo Freire.

In the Section relating to Pathology Prof. Palmer delivered an address in which he discussed the progress of Medicine Toward Exact Science, upon which Dr. Quimby, of New Jersey, and Dr. E. P. Allen, of Pennsylvania, made some remarks. Dr. George R. Elliott, of New York, read the next paper.

An address from the President, Dr. John H. Callender, of Nashville, opened the Section on Physiology. Papers were read by John Alexander McWilliam, of Aberdeen, Scotland, and Daniel Clark, of Toronto, Canada.

In the Section on Gynæcology papers were read by H. Marion Sims, of New York City; William H. Wathen, of Louisville, Ky., and by Nathan Bozeman, of New York City.

The Section on General Medicine was presided over by Dr. A. B. Arnold, of Baltimore, who, in his opening address, spoke of "The Practice of Medicine at the Present Day."

The following papers were also read: "Fibroid Degeneration and Allied Lesions of the Heart, and Their Association with Disease of the Coronary Arteries," Dr. J. L. Steven, of Glasgow, Scotland; "On the Morphology of Rheumatic Blood with Lantern Illustrations," Dr. E. Cutter, New York; "Vaccination and Pasteur's Treatment," Dr. W. H. Whitemarsh, England; "A Clinical View of Pyrexial Antipyretics," Dr. Preston B. Scott, Kentucky.

The Section on Military and Naval Surgery and Medicine was presided over by Dr. H. H. Smith, of Philadelphia, and a number of papers, some very interesting, were read.

TUESDAY, SEPT. 6TH.—SECOND DAY.

The Congress was called to order at 11 o'clock A. M. in general session. The President introduced Dr. Austin Flint, of New York City, who then read his address entitled, "Fever, Its Causes, Mechanism, and Relative Treatment." Dr. Flint's address was regarded a valuable contribution to the study of Fevers. It was listened to with profound interest.

He said that Fevers, especially those belonging to the class of acute diseases, are self-limited in their duration, and are due each one to a special cause, a micro-organism, the operation of which ceases after the lapse of a certain time. We are as yet unable to destroy directly the morbific organisms which give rise to continued Fevers, and we must be content for the present to moderate their action and to sustain the powers of resistance of patients. The production of animal heat involves oxidation of parts of the organism or of food represented in the formation and discharged nitrogenized excrementitious matters, carbonic acid and water. As regards its relations to general nutrition and production of animal heat, water formed in the body is to be counted as an excrementious principle. Fever, as observed in the so-called essential fevers, may be defined as a condition of excessive production of heat, involving defective nutrition or inanition, an excessive production and discharge of nitrogenized excrementitious matter and carbonic acid, with waste and degeneration of the tissues, and partial or complete suppression of the production and discharge of water. Aside from the influence of complications and accidents, the ataxic symptoms in Fevers, the intensity and persistence of which endanger life, are secondary to the fever and are usually proportionate to the elevation of temperature. These symptoms are ameliorated by measures of treatment directed to a reduction of the general temperature of the body. The abstraction of heat by external cold and the reduction of temperature by anti-pyretics administered internally without effecting

the special cause of the fever improve the symptoms which are secondary to the pyrexia. In health, during a period of inanition, the consumption of tissues in the production of animal heat is in a measure saved by an increased production and excretion of water. In Fever, the effects of inanition, manifested by destruction and degeneration of tissues, are intensified by a deficient formation and excretion of water. Alimentation in Fever, the object of which is to retard and repair the destruction and degeneration of tissues and organs, is difficult, mainly on account of derangements of the digestive organs, and this difficulty is to be met by the administration of articles of food easily digested, or of articles in which the processes of digestion have been begun or are partly accomplished. In the introduction of the hydro-carbons, which are important factors in the production of animal heat, alcohol presents a form of hydro-carbon which is promptly oxidized, and in which absorption can take place without preparation by digestion. Precisely in so far as it is oxidized in the body, alcohol furnishes matter which is consumed in the excessive production of heat in Fever, and saves destruction and degeneration of tissue. The introduction of matters consumed in the production of heat in Fever diminishes rather than increases the intensity of the pyrexia. As the oxidation of alcohol necessarily involves the formation of water, and limits the destruction of tissue, its action in Fever tends to restore the normal processes of heat production, in which the formation of water plays an important part. The objects in the treatment of Fever itself are to limit and reduce the pyrexia by direct and indirect means; to limit and repair destruction and degeneration of tissues and organs by alimentation; to provide matters for consumption in the abnormal production of heat, and thus to place the system in the most favorable condition for recuperation after the disease shall have run its course.

After the conclusion of Dr. Flint's address the general session of the Congress adjourned and the various Sections were opened in the places assigned for their work.

SECTION ON GENERAL SURGERY.

The meetings of the Section on General Surgery were held in the Congregational Church.

MONDAY SEP. 5.—AFTERNOON SESSION.

The Section was called to order by the President, Dr. Briggs, of Nashville, Tenn., at 3 P. M., who in a brief address of welcome opened the Section for work.

Dr. Charles T. Parkes, of Chicago, read the first paper, entitled

GUN-SHOT WOUNDS OF THE ABDOMEN.

No subject has interested surgeons more than the treatment of penetrating wounds of the abdomen. In 1885 the whole number of the recorded cases of operation for gunshot wounds of the intestine, was but six. Since 1885 thirty-eight cases have been recorded with eleven recoveries. All cases operated upon should be reported, whether successful or not. Surgical interference in appropriate cases is now the generally accepted view.

The condition and appearances of the external wound gives some indication as to the presence or absence of penetration. A single wound of the abdomen affords a hope that the penetration has not taken place, but it is only a hope. Even the presence of a wound of entrance and exit does not positively indicate injury of the viscera. If there is a trace of tenderness from the wound of entrance some distance, it is fair to infer that penetration does not exist. A large bullet-hole indicates penetration. When in doubt the wound of entrance should be enlarged. In this way the presence or absence of penetration can be determined, and, with the usual precaution, this does not increase the danger.

In diagnosis much value cannot be attached to the subjective sensations. The usual rapid appearance of tym-

panites in a region ordinarily dull, would indicate escape of gas into the abdominal cavity. Localized dullness in the region of the wound or in the dependent portion of the abdomen would indicate hæmorrhage. The presence of blood in the urine indicates wound of the kidney, bladder or ureter. Shock cannot be relied upon, but when present the probability of such injury is very great. The rare phenomenon of fæces in the wound is a positive sign of perforation. The presence of persistent nausea and vomiting also points to injury of the viscera. The absence of pulsation in one femoral vein indicates injury of the iliac vessel.

The following cases were reported:

Case I.—A man shot himself twice in the abdomen. He was seen four hours after the accident. The wounds were four inches to the left of the median line, the one one and a half inches above the other. One ball had gone entirely through the abdomen, making a posterior opening just under the last rib. From this there was considerable hæmorrhage. There was moderate collapse. Penetration was demonstrated and then a median incision was made. Five perforations were found and closed with silk thread. The left kidney was also perforated by the bullet, it was, however, allowed to remain. The patient did well for 24 hours and then failed rapidly from collapse due to considerable bleeding from the wounded kidney.

Case II.—P. I., age 45, was shot in the abdomen. He was not seen until 16 hours after the injury. The wound was in the right iliac region. On opening the peritoneum fæcal matter escaped. Only one opening was found and this was closed with the continuous suture. There were evidences of distinct peritonitis and the man died sixteen hours after operation. The patient would in all probability have recovered if the operation had been done earlier.

In the treatment of gun-shot injuries of the abdomen, incision in the median line is the better in the majority of cases. There are exceptional cases in which enlargement of the original wound answers the purpose. The continuous suture answers every purpose and as it can be inserted more rapidly than the Lembert, it is preferable. Silk is preferable to cat gut in making the sutures. Where resection is required, two methods of procedure may be adopted. In cases where the mesenteric border cannot be raised, section should be made through the healthy bowel and a triangular portion of the mesentery also removed. The two portions of the bowel are then brought together and secured with sutures, the first suture being introduced at the junction of the mesentery and intestine. In no case had the author found it necessary to use more than one row of sutures. All raw surfaces should be covered with peritoneum. The second method is applicable in cases where the mesenteric border is not injured. In these cases the section does not involve the mesenteric border of the intestine. The injured portion is alone removed and the edges of the healthy bowel brought together with the continuous suture. Where the omentum is injured the hæmorrhage is often severe, requiring the removal of a large portion of the structure. All slits and lacerations in the omentum should be closed by continuous sutures. In perforation of the stomach there is no difficulty in closing the wound after it is found. Where there is no complication wounds of the stomach usually heal satisfactorily. In gun-shot wounds of the liver the surface should be brought together by deep sutures. The same procedure may be employed in the case of the spleen, but where this organ is badly lacerated, extirpation is indicated. Perforating wounds of the kidney call for extirpation. Perforation of the liver, spleen or kidneys with a similar injury of the small intestines greatly increases the gravity of the case, and such cases will usually end fatally. Wounds of the bladder call for sutures.

Special stress was laid on the necessity of seeking out all wounded blood vessels thus preventing the danger of primary or secondary hæmorrhages. There should be a careful search made for all wounds of the intestine, the

bowel being examined in a systematic manner. Tight sutures should be avoided, for these will lead to sloughing and extravasation. If the peritoneal surfaces are laid intact and kept there for a few hours, adhesions will take place.

Dr. N. Senn, of Milwaukee, Wis., read a paper on

AN EXPERIMENTAL CONTRIBUTION TO INTESTINAL SURGERY, WITH SPECIAL REFERENCE TO THE TREATMENT OF INTESTINAL OBSTRUCTION.

The indications in the treatment of intestinal obstruction are to remove or render harmless the cause of the obstruction and the immediate restoration of the continuity of the intestinal canal when forming an anastomosis between the portion of bowel below and that above. One hundred and fifty operations were performed on animals. The principal forms of intestinal obstruction were produced artificially and the attempt was made to devise some new operation whereby the obstruction may be relieved when the removal of the cause is not possible. The length of time required in the performance of the present operations is their great contra-indication. By simplifying the method of operation, the author had been able to lessen the time. To prevent extravasation during the progress of the operation the author had employed a narrow rubber band tied around the intestine with sufficient force to occlude it. He had never observed any injurious effects following the use of elastic compression.

The study was first directed to simple stenosis, which was produced by cutting out a semilunar portion of the bowel. Traumatic stenosis from this cause becomes a source of danger from obstruction or from perforation when the lumen of the bowel is reduced more than one-half. When excision of the bowel is required for injury not more than one-half should be taken away. If more is required, circular excision should be resorted to. Longitudinal suturing of wounds on the mesenteric side of the bowel should never be practiced, for this is invariably followed by gangrene and perforation through interference with the blood supply of the portion of bowel corresponding to the vascular defect. In circular constriction of the bowel, the immediate cause of gangrene is obstruction to the venous supply of the bowel and takes place first at the point most remote from the cause of obstruction.

Flexion was then produced by removing a portion of the bowel transversely and suturing of the wound. It was found that on the convex side, a defect one inch in width could be closed by transverse suturing without causing obstruction by flexion. In such cases the flexion is subsequently corrected by a compensating bulging of the mesenteric side of the bowel. Closing of such a wound by transverse suture on the mesenteric side of the bowel, may give rise to intestinal obstruction by flexion, and to gangrene and perforation by seriously impairing the blood supply of the portion of bowel involved. Flexion caused by inflammatory and other extrinsic causes, gives rise to intestinal obstruction only when the functional capacity of the flexed portion of the bowel has been diminished or suspended by the causes which have produced the flexion, or by subsequent causes independent of the flexion.

Volvulous is simply another form of flexion. Volvulous gives rise to symptoms of obstruction, when the causes which have caused the rotation of the bowel, have at the same time produced impairment or suspension of the peristalsis in the portion of the bowel which constitutes the volvulous, or when a diminution or suspension of peristalsis follows in consequence of the rotation.

In invagination, one of the most important factors in preventing disinvagination and inducing gangrene of the intestines is the accumulation of intestinal contents above the real invagination. Spontaneous reduction is not more frequent in ascending than in descending invagination. The immediate cause of gangrene is obstruction to the return of venous blood by contraction at the neck of the intussusception. Ileo-cæcal invagination when recent can frequently

be reduced by distension of the colon and rectum with water, but this method of reduction must be practiced with great care and gentleness, as over distention of the colon and rectum is productive of multiple longitudinal laceration of the peritoneal coat, an accident which is followed by the gravest consequences. The distention of the cæcum is effected by a mechanical separation of the margins of the valve, consequently it is imprudent to attempt treatment of intestinal obstruction beyond the ileocæcal valve by injections per rectum.

In a study of the effects of enterectomy, it was found that in dogs resection of more than six feet of the small intestines was uniformly fatal, the cause usually being the immediate effect of the operation. Resection of more than four feet is incompatible with normal digestion, absorption, and nutrition, and often results in death from marasmus. In cases of extensive intestinal resection,the remaining portion of the intestinal tract undergoes compensatory hypertrophy.

It was also found that physiological exclusion of an extensive portion of the intestinal tract, does not impair digestion, absorption and nutrition as seriously as the removal of a similar portion by resection. Fæcal accumulation does not take place in the excluded portion of the intestinal canal.

Objection was made to the various forms of suture used in circular enterorrhaphy for these reasons, first the time required for their insertion, second, the danger of puncturing the bowel and third the interference with nutrition which they cause. The author recommended catgut in preference to silk. It was recommended that a rubber tube be introduced into the bowel and the wound closed over it by two sutures. Ectropion is prevented during operation by compression.

The line of suturing or neck of the intussusception should be covered by a flap or graft of the omentum in all cases of circular resection as this procedure furnishes an additional safeguard against perforation. In circular enterorrhaphy continuity of the peritoneal surface should be secured where the mesentery is detached by uniting the peritoneum with fine cat-gut before the bowel is united. This furnishes better security against perforation of the mesenteric side. A strip of the omentum two inches wide is placed around the line of junction and secured with two sutures.

The formation of a fistulous communication between the bowel above and below the seat of obstruction should take the place of resection and circular enterorhaphy in all case swhere it is impossible or impracticable to remove the cause of obstruction or where the pathological conditions which have given rise to the obstruction do not constitute an intrinsic source of danger. In performing this operation the speaker after experimenting with plates of various materials adopted decalcified or partially decalcified bone. This procedure is indicated as a substitute for gastro-enterostomy. The stomach is exposed and a longitudinal incision is made in its anterior aspect so that a decalcified bone plate having a sufficiently large opening, may be introduced. This is secured in proper position by sutures introduced in the margin of the fistulous wound. The upper portion of the small intestines is treated in the same way and the two parts are then brought in apposition and secured with silk sutures. In almost every instance where this had been done the result had been favorable. While the ordinary operation requires at least an hour for its performance, this operation can be performed in the space of ten minutes. The same method of treatment is applicable throughout the intestinal canal where it is desired to form a fistulous communication between the bowel above and below. If there are indications of sloughing of the bowel or threatened gangrene, no such procedure should be adopted. An ileo-colostomy or an ileo-rectostomy can also be done by lateral implantation of the small intestine being introduced into an opening made in the large intestine and secured with a few stitches. In this case, a piece of rubber tubing is inserted into the bowel to keep it patulous. The restoration of the continuity

of the intestinal canal by perforated approximation plates or lateral implantation should be done in all cases where circular enterorrhaphy is impossible on account of the difference in size of the lumina of the two ends of the bowel. In cases of multiple gunshot wounds of the intestines involving the lateral or convex side of the bowel the formation of intestinal anastomosis by uniting two of the openings with decalcified bone plates should be preferred to the use of sutures as this procedure is equally if not more safe and requires less time.

The author had also made certain experiments with reference to the time required for the formation of adhesions. Definite healing of an intestinal wound is only completed after the formation of a net work of new vessels in the product of tissue proliferation from the approximated serous surfaces. Under favorable circumstances quite firm adhesions are formed between the peritoneal surface within six to twelve hours which effectually resist the pressure from within outwards. Scarification of the peritoneum at the seat of approximation hastens the formation of adhesions and the definite healing of intestinal wounds.

Omental grafts from one to two inches in width and sufficiently long to encircle the bowel, retain their vitality, become firmly adherent in from twelve to eighteen hours and are freely supplied with blood-vessels in from 24 to 48 hours. Omental transplantation of omental grafting should be done in every circular resection or suturing of a large intestinal wound as this procedure favors the healing of the visceral wound and furnishes an additional protection against perforation.

The Section then adjourned.

(*To be continued.*)

It is announced that the Queen has conferred the order of knighthood on Dr. Morell Mackenzie for his service to the Crown Prince of Germany,

The Tenth International Medical Congress will meet at Berlin in 1890.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 per annum, payable in advance.

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, SEPTEMBER 10, 1887.

Editorial.

MEETING OF THE INTERNATIONAL CONGRESS IN WASHINGTON.—As we go to press the Ninth International Congress is still holding its sessions in Washington. The entire week will be consumed with the work of the Congress and the social entertainments, which are a necessary feature of such gatherings.

The Congress opened on Monday morning with a few remarks from President Cleveland and has since continued its morning and evening sessions under extremely favorable circumstances. The weather has been propitious and envigorating, the Capitol is gaily festooned with autumn flowers, and the genial faces of medical men from all parts of our land, and from foreign lands, add enthusiasm to the assemblage of medical minds such as is rarely witnessed. Perhaps never before in the history of the profession of America has so large a number of medical men come together in social or scientific relationship. From the North and from the South, from the East and from the West there came strong and vigorous medical minds, some stored with the experience and wisdom of lengthy service, others fresh, earnest, and eager for the learning which was to fall from the collective wisdom of the assemblage. Young men with diplomas fresh from college, middle-aged men with energies quickened and nerves well regulated for effective service, and old men, honored by years of faithful work,

and resting upon laurels well-earned in the prosecution of professional duties, all came to together to give a stable, earnest and efficient compact to the work of the Congress. Looking over this large assemblage of medical minds one cannot help but be impressed with the earnestness, honesty and unselfishness of purpose which was stamped upon their uplifted faces.

The work of the Congress depending for its success upon the large concourse of physicans assembled in Washington, one might safely assume that this success was already vouchsafed for. When we come to measure the standard of this success various factors must be considered. In point of numbers this Congress was probably more largely attended than any previous Congress. In quantity of work the comparison is equally well sustained. In quality of work no opinion can be safely advanced, since this work can only be estimated and safely valued when reproduced in the Transactions of the Congress. In its social features the Congress is not lacking in those elements which make such gatherings of medical men enjoyable. Whilst many men remained at home whose presence at the Congress would have added largely to its success and enjoyment there are enough representative men on hand to add dignity and utility to its scientific work and pleasure and hospitality to its social gatherings. The foreign delegation contains many names of men of world-wide renown in science and of social strength in their respective nationalities. The American delegation is very composite in character. It contains among its representatives an element of that hardy American citizenship which has given individuality and vigor to our material and intellectual development as a people. True American energy, earnestness and push would fitly characterize the work of the Congress. These qualities being more familiar to us than the more careful, laborious and detailed investigations which have characterized the work of the Congresses conducted in European countries, are perhaps less appreciated by our contemporaries at home than by those abroad who are better able to value such efforts.

By whatever standard we measure the Congress, whether in respect to the value of the work it will give to the scientific world, or in respect to other features which it has attempted to represent, it must be looked upon as a large and influential body of professional workers whose labors have not been in vain, and whose coming together has been fraught with good to the great body of the profession throughout our own country and other countries. It perhaps has not been just what many would desire that it should have been; it doubtless has been sustained by many elements of weakness, yet in view of these facts it is none the less an International Congress with many elements of strength and pregnant with far reaching good results.

Ovarian Cyst Simulating Ectopic Gestation.—At a meeting of the Obstetrical Society of Philadelphia, held on April 7th, an interesting case was read for Dr. F. A. Packard. The patient was an Italian woman, aged 29. By a first marriage she had had five children, no miscarriages, and every labour easy. She married a second time two years before coming under Dr. Packard's care. The catamenia were regular until November, 1886, when they did not appear. In December free metrorrhagia set in and lasted for a month; there was tingling in the mammæ, without enlargement, and the face grew blotchy; no abdominal swelling could be detected, and there were no crampy pains. The discharge was fœtid. There were no rigors nor high temperature. On pelvic examination a cystic tumour was discovered to the right of the uterus. It was about the size of a gravid womb at the second month. On January 10th abdominal section was performed. A small cyst of the right ovary was discovered; it consisted of two cavities, into one of which there had been hæmorrhage. It was removed without any difficulty, and the patient recovered rapidly. The uterine hæmorrhage did not recur.—*Brit. Med. Journal.*

Medical Items.

It is estimated that between fifty and sixty well-known physicians and surgeons from Great Britian were present at the Congress. France, Germany, Austria, Italy and Russia were also well represented.

Dr. G. M. Sternberg, of the U. S. Army, who has been absent in South America on special scientific work for the Government, returned home to attend the Congress. Dr. Sternberg will shortly resume his investigations in South America.

A Test for Color-blindness among Railroad Men.—The employees of the Reading Railroad complain that the color-tests have not been fairly conducted, and threaten to strike if they are tested on colors other than red, white, blue, and green, on boards, flags, and lamps.—*Med. Record.*

The display of American Pharmaceutists in the basement hall of Albaugh's Theatre was one of the most attractive features of the Congress. Nearly every prominent pharmaceutist in the country was represented. Many of the exhibits were strikingly handsome. The instrument makers and medical book publishers were also represented.

Professor Francesco Dorante, of Rome, withdrew from the Congress because of a personal insult. He was invited by the Secretary-General to answer in the name of his country to the address of the Secretary of State. Without his consent, Prof. Semmola, of Naples, was called upon to make the answer. Prof. Durante was offended at this breech of courtesy.

Dr. Murphy, of Dublin, Ireland, withdrew from the Congress because he was not invited to the editor's banquet on Monday night. When informed that the editor's banquet was not given under the auspices of the Congress he reconsidered his action. Probably it was not known to those in charge of the editor's banquet that Dr. Murphy was entitled to the courtesy he failed to receive.

The American Academy of Medicine held its annual meeting in Washington on September 3rd. A number of papers were read. The following officers were elected for the ensuing year: President, Dr. F. H. Gerrish of Maine; Vice-Presidents, Drs. W. B. Atkinson, of Philadelphia, Minor, of U. S. Navy, J. H. Baxter, of U. S. Army, and Lindsley of Nashville, Tenn. Dr. R. J. Dunglison was re-elected Secretary and Treasurer.

A new quarterly journal to be known as the *Climatologist* will make its appearance this month under the editorial supervision of Dr. George H. Rohé of this city. Each number will contains 48 pages and the subscription price is fixed at fifty cents per annum. The journal will be devoted to the scientific and practical consideration of questions in the domain of medical and sanitary climatology. Dr. Rohé is eminently qualified for the editorial management of the *Climatologist* and we wish his enterprise every success.

Apropos to the present Congress it may be interesting to note that the first International Medical Congress was held in Paris, in 1867; the second in Florence, in 1869, the third in Vienna, in 1873; the fourth in Brussels, in 1875; the fifth in Geneva, in 1877; the sixth in Amsterdam, in 1870; the seventh in London, in 1881; and the eighth in Copenhagen, in 1884. It was originally intended that the Congress should be held every second year, but at the meeting in London it was decided to hold the meeting once in three years. The Congress met this week for the first time on American soil. It will probably be many years before it will again cross to this side of the Atlantic.

The Paris correspondent of the *New York Times* tells of an amusing occurrence at a recent meeting of an antivisection society held in that city. One of the speakers, a woman, having inveighed particularly against medical students, was asked by a student who happened to be present, why she wore a bird in her hat—"a poor little robin" that "had been slaughtered simply to supply a vain woman with a foolish ornament." The account goes on to say that the lady was cut short in her eloquence, and could only stammer forth the poor protest that she had not done the bloody deed herself.—*N. Y. Med. Jour.*

Dr. Benjamin King, formerly a surgeon of the United States army, recently celebrated his 90th birthday at his residence, Weston, on West river, in the first district of Anne Arundel county, by a "tea" and reception from 5 to 8 o'clock, at which a large number of friends presented their congratulations. Dr. King is a director of the Drum Point Railroad, and takes a great interest in public improvements of all kinds. He takes a horseback ride every day, and is in excellent health and very active. Dr. King entered the army as surgeon's mate seventh infantry, in 1818, was promoted to assistant surgeon with rank of captain in 1847, and in November, 1863, retired, after being in the service more than forty-five years.—*Baltimore Sun.*

Congress Notes.—On Monday night a conversazione was held in the great hall of the Pension Office Building. It is estimated that over 10,000 persons were in the building during the evening. The Association of American Medical Editors entertained the visiting foreign editors at the Riggs House on the the same evening. The affair was a great social success.

On Tuesday evening a reception was given to the profession at the White House by the President and Mrs. Cleveland. This was a notable feature of the Congress.

On Thursday enening a banquet was given in the great hall of the Pension Office. This was largely attended.

Original Articles.

PRACTICAL NOTES ON MEDICAL SUBJECTS.

BY GEORGE J. PRESTON, M.D.,

Professor of Practice of Medicine in Baltimore Polyclinic and Post-Graduate Medical College.

(*Continued from last issue.*)

The Treatment of Valvular Disease of the Heart.

MEDICINAL TREATMENT.

The drug that is probably entitled to a place next to digitalis is *strophanthus.*

In its physiological action it corresponds nearly to digitalis with a few important modifications. It is a muscle poison, causing contraction in all striped muscular tissue, and rendering their contractions more prolonged and complete. The heart receives a larger proportion of the drug, after its absorption, in a given time and consequently is more affected than other muscular structures. The systole is increased in force, and the heart beats slowed by small doses, while large doses produce paralysis with a condition of rigid systole.

This action seems to be produced indepently of the cerebro-spinal system.

The action on the heart is accompanied by a rise in the blood pressure which is due in the main to the increased heart's action rather than any special action on the blood-vessels or the vasomotor center. Its action appears in some cases to be more powerful and rapid than digitalis. The above remarks have been taken from the writings of Fraser, Oliver and others who have carefully investigated the drug.

The advantages this drug possesses over digitalis are: Action on the heart more exclusively, and not to so great an extent on the arterioles, freedom from any tendency to produce irritation of the stomach, and absence of cumulative action.

It can never supplant digitalis, and future investigation must decide its exact value. Its great use at present is in those cases where digitalis cannot be employed. When selected instead of that drug, the therapeutic indications are about the same. It may be given in doses of ♏. ij of the etherial tincture, to be increased if necessary, or in the form of its active principle *strophanthin*, which may be given hypodermically in $\frac{1}{50}$ grain doses.

Convallaria has stood the test of several years' use, and seems to be growing in favor. Its action is very similar to the two first named drugs, though more on the heart and less on the arterioles than digitalis, thus resembling *strophanthus.* Its action is probably less pronounced than either of these substances. It is a prompt and efficient diuretic, has no cumulative effect and does not disagree with the stomach. It seems to be especially useful in *aortic regurgitation* and *mitral stenosis* where the heart's action is weak. It is best administered in the form of the fluid extract in doses of from ♏ x to 3 ss.

The two active principles are *convallarin*, and *convallamarin.*

Caffeine was used for some years before its action on the heart was clearly recognized. It is a decided stimulant, acting probably through the cardiac nerve centres and raising blood pressure. One of its strong points is that it produces very marked diuresis, and according to Jaccoud may be used when, in cardiac cases the kidneys are affected. It is useful in *mitral stenosis* and especially in *mitral regurgitation* where there is much dropsy. It may be given in doses of grs. iij and upwards of the *citrate.*

Adonis Vernalis. Durand says in brief, that the action of this substance is, increase of arterial tension, regulation of the cardiac impulse, diminution in the frequency of the pulse, and increase in the force of the heart's contractions. It acts rapidly, is not cumulative and is well tolerated. Da Costa and J. C. Wilson, of Philadelphia have obtained good results from its use. It seems especially suitable in cases of weak heart, and where digestive trouble

exists as a complication. Its diuretic action is not so marked as that of caffeine. It may be employed in the form of *adonidine*, its active principle, in doses of gr. ½.

Recently some attention has been directed to *sparteine* as a cardiac tonic and stimulant, but according to M. Masius in a paper recently published, this claim is not sustained. He found in his experiments that the drug was an uncertain diuretic and still more uncertain in its action on the heart. It is stated by Oliver that it acts as digitalis, stimulating the heart and causing contraction of the arterioles. The dose of the sulphate is grs. 1–3.

The above mentioned substances are the most important members of the digitalis group.

In reviewing their action it will be seen that in the main it is the same. They stimulate the heart in various ways, either by direct action on its muscle or contained ganglia, or by an impression on the cerebral and spinal centers. The same is true of their action on the blood vessels. In consequence of the production of high arterial tension, many members of this group are active diuretics, and the fact that they equalize the circulation, gives them a certain influence over high temperature. It will be seen, however, that while the general action of all these substances is similar,they possess individual peculiarities, which renders an accurate knowledge of their physiological action valuable. The limits of this paper do not permit the special therapeutic indication to be pointed out in each case. Before selecting any one of these remedies the case should be carefully considered. The condition of the heart whether it is strong or weak, regular or irregular, the amount and relation of hypertrophy and dilatation, the state of the arterial tension, as determined by the pulse, whether it is high or low, the effect which the heart lesion has produced on the other viscera, lungs, liver, kidneys, etc., and the condition of the stomach; all of these points should recieve their due attention, and then from the list of drugs the one selected which would, from its known action, be most likely to meet the requirements. Having thus at our command a number of agents which may be used to bring about the same result we are enabled to avoid the long continued use of a single substance. Frequently it is found that one of these drugs, which has been employed for sometime begins to lose its influence, and then instead of largely increasing the dose it is well to make use of some other member of the same class. Sometimes in the course of heart disease, the hypertrophy becomes excessive, and the cardiac action painfully violent. Or there may exist a condition of excitability and irritability that cannot be made to yield to any of the digitalis group, and we have to look about for other agents. In such cases the cautious use of *morphia* hypodermically will often be of great service. When the excessive hypertrophy is not associated with any evidence of muscular degeneration small doses of *aconite*, or *veratrum viride* may be administered with good effect. Hoffman's anodyne in 3 i doses is useful in calming, and at the same time stimulating the irritable, weak or irregular heart, and acts with rapidity. A belladonna plaster worn over the heart will often relieve palpitation.

When through slow failure, or as a consequence of some temporary depression there is sudden heart failure and great congestion of the pulmonary circulation with much overdistension of the heart's cavities, a few cups or leeches will restore the equilibrium, along with careful stimulation by alcohol. When the heart muscle is weak, and it is not safe to push the cardiac stimulants, and especially if there exists any considerable amount of arterial tension, we have a very valuable remedy in *nitroglycerin*. It paralyzes the arterioles, in some way not yet thoroughly understood, thus dilating the vessels, and lessens the amount of work the heart has to do. Its effect is nearly identical with *nitrite of amyl*, but much less sudden and more permanent. It may be used steadily for a time in conjunction with some member of the digitalis group. The best way to administer *nitro-*

glycerin is in a 1 per cent. solution in spirits of wine, of which ♏ i is the commencing dose. The statement will bear repeating that depressing agents must be employed with great care, and their effects on the heart closely watched. In addition to these drugs which have a special action on the circulation, either stimulating or depressing, there are certain others which may be mentioned. The tonic action of strychnia in atony and relaxation of various structures of the body is well known, and it unquestionably exercises a decidedly beneficial effect upon the weak heart muscle. Both Lauder Brunton and Fothergill have called special attention to this action. The combination of *tr. nucis vomicæ* with *tr. digitalis* will be found to be a most excellent one, not only acting as a tonic to the heart muscle, but by virtue of the almost special action of *nux vomica* on the stomach preventing in large measure the disturbing effects of digitalis. Often in the course of valvular disease, when the hypertrophy is not excessive *iron*, will be strongly indicated. The need of it will be apparent when we reflect that it is of prime importance that the blood should be in the best possible condition. A very useful pill may be prepared by combining digitalis in substance with extract of nux vomica and reduced iron. To meet the same indication that of a hæmic tonic, *arsenic* has a high repute, and an excellent preparation is a pill of *arsenic, strychnia sulph.*, and *reduced iron*. It is needless to mention the various agents employed in a general tonic treatment, suffice it to call attention to the importance of such treatment in valvular disease.

Nor is it necessary to enter into detail concerning the treatment of the secondary effects of heart disease, since this part of the subject has been sufficiently dwelt upon. A few points may be noted only and of these an important one is the question as to the best means of relieving dropsy. The special agent employed to act upon the heart generally has, as we have seen, diuretic properties, but is often ineffectual, or acts too slowly. The drugs that will be found to give the quickest and most satisfactory results are the hydrogogue cathartics. After using *pulv. jalap co. elaterium*, and various others I have become convinced that the safest, and most satisfactory one in every way, is the concentrated solution of *magnes. sulph.* which various writers have called attention to. It is best given in hot water which will dissolve its weight or a little more of the salt. It should be given in large doses ʒ i to ʒ ii in just sufficient hot water to dissolve it. Given in this way it produces a number of copious watery evacuations, causes very little pain, no depression, and does not usually disagree with the stomach. Of the diuretics, probably the most useful is *squill* in combination with *digitalis*. Any of the others may be employed, of which the *acetate of potash* is the most useful in a mixture containing *tr. ferri. chlor.*

Calomel in small doses has been highly recommended as a diuretic in cardiac dropsy, but in my hands has proved very uncertain.

To relieve the pulmonary congestion, reference has already been made to local blood-letting; this had best be done by cups, the amount of blood taken being of course regulated by the effect produced. Not unfrequently the general anasarca becomes threatening, and the œdema of the lower extremities very painful. The most generally applicable method of relieving this œdema is by a number of long and sufficiently deep incisions with a scalpel. The wound should be protected by a cloth kept wet with some warm antiseptic solution, and frequently changed.

Few diseases, in their course of treatment, require a more exact knowledge of the physiological action of drugs than the one under consideration. It is not claimed that heart disease can be cured, that the valves can be restored to their original perfect condition, for this rarely if ever happens; this is claimed, however, and the claim is fully substantiated, that the disease may, in a large number of instances, be held in abeyance and that the added years of life bear a ratio to the skillfulness of the treatment.

In conclusion the treatment of valvular disease may be summed up as follows:

1. Prophalaxis consist in the careful treatment of acute rheumatism, and the avoidance of excess in the use of certain substances which have a known action on the heart, such as alcohol, tobacco, tea, coffee, and attention to the heart when disease in other organs affects seriously the circulation.

2. Certain general measures as light work, avoidance of sudden exertion, mental tranquility, well regulated diet, rest, or in some cases suitable exercise, and all that is included under scrupulous personal hygiene.

3. Avoidance of medicinal teatment until necessary, careful selection and administration of the suitable agent, maintenance of the heart's equilibrium, attention to special conditions and the judicious use of tonics.

ARE WOUNDS FROM EXPLOSIVE BALLS OF SUCH A CHARACTER AS TO JUSTIFY INTERNATIONAL LAWS AGAINST THEIR USE?*

BY ROBERT REYBURN, M.D.,

Professor of Physiology and Clinical Surgery, Howard University, Washington, D. C., Formerly Brevet. Lieut. Col. and Surgeon U. S. Vols., and Captain and Assistant Surgeon, U.S.A.

The proper discussion of the question, whether explosive balls should be prohibited by International Law, is largely influenced by the changed conditions of modern, as compared with ancient, warfare. Human history is mostly composed of the biographies of rulers of mankind, who have waged wars either to gratify their insane ambition, or out of hatred of those nations or peoples who refused to submit to their authority. During all the innumerable wars which have occurred from a period antedating written human history to the present time, men have been earnestly endeavoring (with an ingenuity worthy of a better cause) to find new and more destructive agents by which they might more easily mutilate and destroy the bodies of their fellow men.

In our day the perfection attained in the various forms of large and small rifled projectiles has been truly wonderful, and the destruction of human life in the great battles of modern times has assumed the accuracy of an algebraic equation.

The philosopher in studying the gloomy record of the history of wars, would have little to comfort his soul, were it not for the admitted fact that the improvements in the construction of the projectiles and fire-arms used in war have been accompanied with a marked diminution in the relative mortality of the combatants engaged in the battles of modern times as compared with the ancient. A battle in the days before the invention of gunpowder was in a measure a succession of single combats. Men selected their antagonists and fought with them man to man, and after being disabled the conquered were usually summarily dispatched, or if not put to death at once, were saved for a bondage worse than death. Often after being publicly exhibited as a part of the spoils of the conqueror, the prisoners were slaughtered in cold blood. Now among civilized nations during warfare when the enemy becomes disabled from wounds, he generally receives all the care and attention necessary in his helpless condition, either from his comrades or often from his late antagonists. The chief endeavor in the battles of ancient times was to kill as many of the enemy as possible in a given time. The same end is attained in modern battles but it has been found that an enemy wounded sufficiently to become *hors de combat* is practically much more a source of weakness to his comrades than if he were slain in battle. When he is severely wounded, not only is he as useless to the army as if he formed no part of it, but he has wants to be attended to that require the services of many men, who could otherwise be employed in active duty as soldiers. Humanity, which finds a lodging place even in the bosom

*Read before the Section on Military Surgery, Ninth International Medical Congress.

of "grim-visaged war," demands that ambulance corps shall be provided for the carriage of the wounded soldier to a place of safety; hospital surgeons, stewards, and nurses shall be engaged in attending to him, whilst a large portion of the commissary's and quartermaster's department has to be employed in furnishing him with needed supplies and transportation. Not only is this the case at the time he receives his wound, but this disability continues for weeks and months, in fact during the whole period of his convalescence. In place of aiding in the active duties of warfare, the sick or wounded soldier is a hindrance instead of a help. The objection may be made to this statement that a great portion of the care the wounded soldier requires may be given by non-combatants or by persons unfit to perform military duty. Whilst this is true to a certain extent, yet by far the greater portion of the attendance required demands the services of able-bodied men. It is probably too low an estimate to state that every wounded man needs the services of two able-bodied men for his care and sustenance until he becomes again fit for military duty. If then the object of modern war is not the taking away of life, but rather the disabling and rendering unfit for active service of the enemy's soldiers, why should the inevitable horrors of war be further aggregated? The use of explosive balls does not accomplish any more effectually the disabling of the combatants, but converts slight wounds into grave and fatal injuries of vital organs. The characteristics of wounds caused by explosive balls or bullets are great shattering of the bones at point of injury with comminution of the fragments, the soft tissues are extensively lacerated with great distention of the parts; this is followed by extensive sloughing. In many cases the reparative powers of nature are insufficient to fill up such extensive loss of tissues. These injuries are often accompanied by the dangers of both primary and secondary hæmorrhage and are also followed by the frequent occurrence of erysipelas and pyæmia. During the early part of the late war of the Rebellion (U. S.) some thousands of Gardner's explosive bullets (33,350) were issued to the United States troops, but their use was soon abandoned and never resumed. The Medical and Surgical History of the Rebellion (Vol. III, p. 702) describes Gardner's explosive bullets as follows:

"These Gardner Explosive Bullets or Musket Shells were cylindro-conoidal projectiles of lead made in two sizes, the larger of calibre .58 weighing four hundred and fifty-one grains, the smaller of calibre .54, weighing three hundred and sixty-three grains. Within the interior is placed an accurately fitting acorn-shaped chamber filled with fulminating mercury and communicating with a 1¼ time fuse, which is exposed to the charge in the rear of the missile; the fuse is ignited by the discharge of the piece. The bursting charge is sufficient to send the bullet and transform it into a gagged dangerous missile. Should it have penetrated the body before exploding its effects are still more destructive."

The subject of the employment of explosive balls or missiles has been a matter of contention among the military powers of Europe from the time of the discovery of the fulminates until the present time. During the year 1868 by an agreement made by all the principal nations of Europe at an International Military Conference which was held at St. Petersburg in October of that year, all the great powers resolved to abstain from the use of explosive projectiles under the weight of four hundred (400) grammes.

The text of a portion of this treaty is as follows:"

"Considering that the progress of civilization ought to have the effect of lessening as much as possible the calamities of war: That the only legitimate object that states ought to propose to themselves during war is to weaken the military strength of their enemies; That for this purpose it is sufficient to put *hors de combat* the greatest number of men possible: That this end would be overpassed by the employment of arms which would uselessly aggravate the wounds of men placed *hors de combat*

or that would render their death inevitable: That the employment of such arms would be consequently contrary to the laws of humanity: The undersigned having received the orders of their governments in this respect are authorized to declare as follows:

1st. "The contracting powers mutually bind themselves to renounce in case of war among themselves the employment by their land and sea forces of all projectiles charged with explosive of inflammable matters of a less weight than four hundred (400) grammes."

For the reasons so well and cogently expressed in the language of the above treaty, and the sake of common humanity, we believe that the use of explosive balls or bullets in war should be forever prohibited by International law.

A CASE OF RECURRENT RETINAL HÆMORRHAGES, FOLLOWED BY THE OUTGROWTH OF NUMEROUS BLOODVESSELS FROM THE OPTIC DISC INTO THE VITREOUS HUMOR.*

BY SAMUEL THEOBALD, M.D.,

One of the Surgeons to the Baltimore Eye, Ear, and Throat Charity Hospital,

Mrs. X., 52 years of age, of plethoric habit, and who had experienced occasional attacks of giddiness and flushings of the face since the cessation of menstruation, which had occurred not long before, called to see me on April 12, 1886, because of a sudden change which she had noticed in the vision of her right eye. She had previously been under my care, having suffered with asthenopia, attended by hyperæmia of the conjunctiva, for which I had prescribed distance and near glasses, she being hypermetropic as well as presbyopic, and having $\frac{1}{50}$ of astigmatism and less hypermetropia in the right eye. About three months before the date mentioned the conjunctiva of the right eye had become suddenly injected, and occasional pains had been felt in this eye. The patient also complained at this time of intermittent obscurations of vision, which she was inclined to connect with attacks of indigeston from which she suffered, and for which pepsin and bismuth were prescribed. The hyperæmia and other symptoms of this attack disappeared in a short time, however, under simple treatment.

Upon making an opthalmoscopic examination on April 12th, several small hæmorrhages were discovered in the retina of the right eye, in the neighborhood of the optic disc. Examination of the urine, which was at once made, gave a negative result; the heart also was pronounced healthy by competent authority. The treatment instituted was the application to the temple, twice a week, of the artificial leech and the administration three times a day of hydrarg. bichlorid. gr. $\frac{1}{24}$. For a few days the changes in the fundus of the eye became more pronounced, especially above the disc, the retina in this region becoming œdematous and the central vessels distended and tortuous, while the extravasation of blood increased, extending forward towards the equator of the eye. The diagnosis was thrombosis of one of the superior branches of the central retinal vein. The region of the macula was at no time seriously involved, the vision of the affected eye, at its worst, being $\frac{20}{L}$ (?).

There was nothing unusual in the behavior of the eye after this first hæmorrhage. The condition of the retina slowly improved, and the extravasated blood gradually underwent absoption. The patient was seen June 1st by Dr. Charles S. Bull, of New York, who wrote me that he was inclined to accept my theory of venous thrombosis as the cause of the trouble. By his advice she was given for some weeks small doses of tinct. digitalis (gttiij) and ergotine (gr.j), three times a day. During the second week in July she left Baltimore to spend the summer at the sea shore. By this time the vision of the right eye had improved to $\frac{20}{XL}$ (?) and ability to read J. no. 1. About the first of August a change occurred in the vision, and Dr. H. Derby, of Boston, who was near at

*A paper read before the American Opthalmological Society, July 21st, 1887.

hand, made an ophthalmoscopic examination and, as reported, discovered three fresh retinal hæmorrhages.

The patient having returned to Baltimore, I examined the eye on August 30th, and found it in every respect much better than when I had last seen it; only slight traces were discoverable of the former hæmorrhage, and V had improved to $\frac{20}{xx}$ (?) On September 30th, however, a small fresh hæmorrhage (flame-like in shape) was discovered just below the disc. By October 30th this had nearly disappeared; but she then complained of seeing a dark object, which had suddenly made its appearance before the R. eye. The ophthalmoscope showed a globule of blood, having a diameter about equal to that of the disc, suspended in the vitreous humor a short distance in front of the retina, and a little below and to the nasal side of the papilla. V=$\frac{20}{xxx}$ (?). By the middle of November hardly a trace was left of this clot. On January 3rd, 1887, V was again $\frac{20}{xx}$ (?), and the condition of the fundus had still further improved; but there was complaint of recent neuralgic pain about the R. eye, and on the 20th of the same month I discovered several fresh hæmorrhages—one in the retina near the disc and the other in the posterior part of the vitreous humor. There were also in the vitreous, above the disc, several string-like opacities of brownish color, evidently the remains of other hæmorrhages. The artificial leech was again employed, and the bowels regulated by aloin pills; and V, which had declined to $\frac{20}{c}$ (?), rose by February 22nd to $\frac{20}{xx}$ (?). On March 5th a crescentic opacity was seen in the vitreous humor, just in front of the disc. Ergotine, gr. ss 3 times a day, was resumed. April 20th, floating opacities in the lower part of the vitreous humor were observed, and the reddish opacity in front of the papilla, which had increased in size, was found to contain numerous fine blood-vessels, which ran forward, parallel with one another, from the neighborhood of the disc margin towards the centre of the vitreous. At this time the papilla was nearly hidden from view by this singular growth, which consisted, apparently, simply of a mass of small blood-vessels, held together and supported by semi-opaque tissue, which presented a smoky appearance in contrast with the surrounding vitreous humor. It was flame-like in form, extending farther forward at some points than at others, and having a nebulous offshoot which ran in the neighborhood of the macula, but in which I could not discover any vessels. For a short time this growth (which was seen by Dr. Wm. Thomson, of Philadelphia, soon after it had made its appearance) seemed to increase somewhat in size, but after this I thought I discovered a diminution in it. The last time the patient was seen was on June 3rd, shortly after which she sailed for Europe. The growth was then perceptibly smaller, and the patient was less conscious of its presence, the sight of the affected eye being, as she described it, more natural. Her vision was not tested at this visit, but when determined a short time before was for the R. eye $\frac{20}{xx}$ (?)

The case is without a parallel in my experience; but I am inclined to regard the development of new vessels, which is its peculiar feature, as an effort of nature to clear away the debris of the repeated hæmorrhages, and to repair the damage which they had caused. Unless, therefore, other, and more disastrous, hæmorrhages should yet occur, a favorable result may, I think, be anticipated.

The Treatment of Acute Coryza.—Fritsche, of Berlin, has found the following useful:

℞.—Acid. acetic. glacial,
Acid. carbolic āā gr. 30.
Mixt. oleoso-balsam ʒ 2
Tr. moschi ♏ 15.—M.

Fifty drops of this may be put upon cotton and enclosed in a convenient flask. Inhalations, at first every half hour, and later at longer intervals for ten minutes will be found beneficial.—*Berliner klinische Wochenscrift*, July 4, 1887.—*Med. News.*

Society Reports.

NINTH INTERNATIONAL MEDICAL CONGRESS.

HELD IN WASHINGTON D. C., SEPTEMBER, 5TH, 6TH, 7TH, 8TH, 9TH AND 10TH.

(*Specially Reported for the Maryland Medical Journal.*)

(*Continued from last issue.*)

SECTION ON GENERAL SURGERY.

TUESDAY, SECOND DAY.—MORNING SESSION.

Dr. Felix Dehaker, of Rouḥaux, France, read a paper on

A NEW FORM OF ABDOMINAL SUPPORTER.

This supporter differs from most others in being thickly padded. It receives its support from behind and encircles the abdomen grasping it as a hand. It sustains the intestines which tend to bear down upon the uterus. It gives relief to the lateral ligaments which have been streched during pregnancy.

Dr. John Homans, of Chicago, read a paper on

THREE HUNDRED AND EIGHTY-FOUR LAPAROTOMIES FOR VARIOUS DISEASES.

The author confined himself wholly to his own experience. Of the 384 laparotomies, 282 were ovariotomies; 27 removal of uterine tumors; 19 simple exploratory laparotomies; 15 laparotomy and stitching the ovarian cyst to the skin; 5 removal of uterine appendages for fibro-myoma; 5 removal of uterine appendages for nervous diseases; 1 pyosalpinx; 1 tubo-ovarian; 1 abdominal abscess; 2 removal of immense lipomas; 4 intestinal obstruction; 3 renal tumor; 1 perityphilitic abscess.

The general method of operation is as follows: The sponges are prepared by soaking in 1 to 1000 corrosive-sublimate solution. They are then wrung out dry by an ordinary wringing-machine. They are then kept in a 1 to 20 carbolic solution. The carbolic acid spray is always used, although it was considered unnecessary. An electric light is always kept in readiness.

Of the first five unantiseptic operations all the patients died. Of the antiseptic operations 248 recovered and 34 have died. The vitality or viability of the patient has much to do with the result of the operation. The usual causes of death have been peritonitis or septicæmia. He was sceptical about the occurrence of mechanical intestinal obstruction, except as the intestines are paralyzed by peritonitis. Two cases in which the bladder was wounded during ovariotomy, recovered and are living two and six years respectively after the operation. In both cases the opening in the bladder was closed with silk sutures Of the recoveries, nine patients died of abdominal cancer a few months or years after recovery, and thirty have ventral hernia. There were fifteen children born to eleven women out of about two hundred heard from. The sexes do not correspond to the ovary remaining.

The usual length of the incision is about two inches. The stump is always tied, buried and dropped back. Silk sutures are used and care is taken to include all the abdominal parietes particularly the transversalis fascia. Drainage was used in fifteen cases. The greatest number of consecutive recoveries after ovariotomy has been 38. The author had never seen a suppurating ovarian cyst but once and in that case the cyst had been tapped. There are cysts which contained fat and sebaceous matter and to the naked eye looks exactly like laudable pus and can only be distinguished from it by microscopical examination. There were two cases of swelling of the parotid gland after ovariotomy. Both recovered quickly and the speaker did not regard enlargement of the parotid during convalescence as of special importance.

The cases of removal of uterine fibroid tumors number twenty-seven, with seventeen recoveries. The later cases have nearly all recovered. The operation is never done unless the pa-

tient is in danger of her life from hæmorrhage, mechanical pressure, or exhaustion, or she suffers great pain.

In the cases of ovarian cysts, uncomplicated except by adhesion where the tumor could not be removed, and in which the cyst was stitched to the abdominal wall, numbering nine, recovery has followed. The author had but one case of collection of pus in the abdominal cavity which was treated successfully by laparotomy and drainage. Of salpingitis and abscess of the ovary due to gonorrhœa, there had been one case. This was treated by removal of both tubes and one ovary, the other ovary being so imbedded that it could not be removed. The patient recovered. Of removal of large intra-abdominal fatty tumors, there were two cases, both ending fatally. The speaker had one case of operation for tumors of Meckel's diverticulum in an infant five months of age, resulting in complete cure. In one case of intestinal obstruction caused by Meckel's diverticulum occurring in a young man 21 years of age, the case resulted fatally. One case of cure of tubercular peritonitis and dropsy by laparotomy was reported. The patient is now fat and healthy, three years after operation.

Three cases of removal of the kidney for sarcoma, cancer and abscess were operated on with fatal result. There were five cases of lumbar colotomy, or pubic colotomy, three of which were successful. The author had removed a fibroid tumor in the abdominal fascia and peritoneum of the lumbar region by laparotomy. The patient is now in good health four years after operation.

A number of cases of special interest were briefly reported and an exhaustive table of all the cases operated on was given.

The following resumé was given :

282 Ovariotomies,	248 recoveries,	34 deaths.	
27 Hysterectomies,	17 "	10 "	
32 Partial removals of uterine and ovarian tumors,	10 "	22 "	
19 Exploratory operations,	16 recoveries,	3 deaths.	
10 Removal of uterine appendages,	9 "	1 "	
14 Miscellaneous laparotomies,	5 "	9 "	
384	305	79	

Dr. Addinell Hewson, of Phildelphia, read a paper on

AN IMPORTANT POINT CONNECTED WITH ABDOMINAL SURGERY.

The point referred to was in connection with the coaptation of the wound after laparotomy. The diminution of the number of ligatures and the lessening of their irritating properties is of great importance. The abandonment of sutures was recommended, the wound being kept in apposition by means of gauze secured on each side by bookbinder's glue. The glue is not applied nearer than one-half inch from the wound. This dries as quickly as collodion, dries on a moist surface and holds securely; gauze so secured will support twenty pounds to the square inch. It is not disturbed by motion or distension.

Dr. J. M. Mathews, of Louisville, Ky., read a paper on

WHEN IS COLOTOMY JUSTIFIABLE?

The following conclusions were presented :

1. Colotomy is not justifiable in cases of cancer of the rectum.

2. In stricture or obstruction of the rectum from whatever cause, within three and one-half inches of the sphincter, colotomy should not be performed.

3. The operation is not warranted in cases of ulceration of the rectum unless of specific origin and accompanied with stricture beyond the reach of the finger.

4. Colotomy should not be performed for the presence of a tumor or aneurism causing pressure on the bowel.

5. In cases of congenital occlusion of the rectum, the operation is not to be recommended.

6. In cases where the operation is looked upon as a dernier resort, colotomy should not be done, save for total obstruction, of benign or specific origin, located further than three and one-half inches above the sphincter.

7. Where the rectum or sigmoid flexure is closed by a stricture of benign or specific origin colotomy is indicated :

The reasons for advising against col-

otmy in the cases given above were first, that the operation does not prolong life; second, admiting that life could be prolonged, the operation is not advisable; third, instead of prolonging life, surgical interference shortens life, and fourth, the pain is not materially lessened by the operation. Where the disease is located within three and one-half inches of the sphincter, it may be treated by division. In other cases, rectotomy was recommended.

The discussion on the paper on laparotomy was postponed until the afternoon session, and it was decided to at once proceed with the discussion of Dr. Mathew's paper.

DISCUSSION.

Dr. Dawson, of Cincinnati: I agree that colotomy is a tearful resort. I have never performed it with any satisfaction to myself and but little to my patients. There are, however, cases in which it seems to be indicated. I have now a patient, a young man of 17 years with an immense cancerous mass in the rectum almost beyond the reach of the finger and narrowing the calibre of the bowel to one-half inch. There is, however, not the slightest sign of cachexia. The growth is accompanied by extreme pain. I have almost decided to open the abdomen and if possible remove the mass with a portion of the gut. This operation has been done in Europe but it is not old enough to enable us to judge of the results to be attained. In syphilitic cases, where there is stricture, the stricture disappears under auto-syphilitic treatment.

Dr. J. M. Quimby, of Jersey City: I agree with Dr. Mathews in the views that he has expressed. I have performed operations similar to that suggested by Dr. Dawson, but the result was not satisfactory. Unless there is total stricture, the operation is hardly justifiable.

Dr. Samuel Benton, of London: I understood the author to say that colotomy is not to be recommended for total obstruction due to cancer of the rectum. My practice is, if I can get beyond the cancer, I do extirpation. If the growth is so high that I cannot remove the whole of it, I perform colotomy. I would recommend colotomy in these cases of cancer of the rectum. In the cases that I have life has been prolonged about fifteen months after colotomy. The last case lived eighteen months. There was complete obstruction and if the operation had not been performed the patient would have died in two weeks. It is my experience that the straining and bearing down at stool is relieved by colotomy. The growth to a certain extent remains at a standstill and a considerable amount of the pain is relieved. After rectotomy the stricture quickly returns. I treat benign tumors by electrolysis. This quickly relieves the stricture. The treatment is safe and can be continued while the patient remains at his ordinary work. I do not say that the stricture does not return, but it can be kept down by a repetition of the electrolysis or by dilatation practised by the patient.

Dr. J. W. C. O'Neil, of Gettysburg: The proper course to be pursued in the case referred to by Dr. Dawson would be to put the patient under chloroform, inject the mass with carbolic acid and scrape it out. This will afford relief.

Dr. J. W. Hamilton, of Columbus: I would utter a word of warning against the use of carbolic acid in the treatment of diseases of the rectum. The use of this agent is fraught with danger. Where there is obstruction due to cancer of the rectum colotomy should be performed.

Dr. Moore, of Rochester: With reference to the case of Dr. Dawson, I would say that it is extremely rare to have cancer in a person only 17 years of age. After that age sarcoma is very common. This is not accompanied by the cancerous cachexia and every surgical operation for sarcoma is a failure. I should strongly object to the operation proposed and would recommend colotomy.

Dr. W. N. Hingston, Montreal: The operation of colotomy should be performed where there is obstruction. It also relieves pain. When the whole of the mass can be gotten away rectotomy should be performed.

Dr. J. C. O'Neil, of Gettysburg: I have used carbolic acid for ten or fifteen years and as a general rule have found if of value.

Dr. Mathews: I would merely say that carbolic acid is a hazardous remedy and has caused much damage and has led to hundreds of deaths.

Adjourned.

Afternoon Session.

Discussion of papers on abdominal surgery.

Dr. W. N. Hingston, of Montreal: It has been said that hæmorrhage and shock are misleading and I agree with this. Fæcal discharge clearly indicates operation. The rule to operate when in doubt is a good one, for the exploratory incision cannot add to the risk.

With reference to the length of time required for operation, while it is desirable to operate with all possible speed, all hurry should be avoided. Time is not of such moment as generally supposed. It has been asserted that gangrene was not the result of interference with the arterial supply. This is contrary to all of my previous ideas, but I am not in a position to deny it.

Dr. Senn's paper is without exception one of the ablest papers I have ever listened to.

Dr. Holman speaks of having had ventral hernia in 10 per cent. of his cases. This strikes me as large, and I would ask how he closes the abdominal wall, whether he takes only the skin and peritoneum or includes everything. I would direct particularly attention to the doctor's statement that he has performed five operations of removal of the ovaries for nervous disease with only partial success. This is quite different from the reports usually made. The removal of normal ovaries appears to be epidemic in certain places. I have never removed an ovary weighing less than fifteen pounds. The immunity that attends abdominal section has made these operations very frequent.

Dr. J. B. Murphy, of Chicago: In the three cases which I have had there has been no shock, and no appearance of fæcal matter in the wound, although in one case there were eleven wounds. While in the majority of cases the median incision is the best, there are cases in which enlargement of the wound is to be preferred. The operation should be done early, for after severe peritonitis has set in the operation will be of little service. If there is penetration an exploratory operation will not add to the danger if the intestine is wounded, death is certain.

Dr. W. F. Beck, of Davenport: I would report a case in which I opened the abdomen of a man apparently suffering from intestinal obstruction. I found a portion of the ileum strangulated under an adherent vermiform appendix. I tied the appendix in two places and divided it. The patient made a complete recovery. There were no antiseptic precautions adopted in this case. With an experience of 78 cases of ovariotomy, it seems to me that our results are improving, and as we devote ourselves more to aseptic surgery and less to antiseptic surgery, I think that our results will be better.

In the treatment of the pedicle, I do use ligature, but rely on the actual cautery not having the iron too hot and applying it to the pedicle held between the clamps. After the application, the pedicle is allowed to remain five minutes undisturbed and the clamp is then carefully removed. There is no fear of hæmorrhage after this procedure.

ABSTRACTS AND EXTRACTS.*

In the address delivered in general session, September 6th, on

Fever; its cause, mechanism and rational treatment,

Professor Austin Flint summed up as follows:

"I am deeply sensible of the great honor of an invitation to address this Congress. This invitation I felt bound

*Selected from Papers and Addresses read before the Ninth International Medical Congress.

to accept, although with a full appreciation of the responsibility which it involved and with much doubt and timidity with regard to my ability to do even a small measure of justice to the occasion. I have selected a topic of great present interest, which has been the subject of much fruitful study within the last few years. In discussing this subject, I have endeavored to apply the physiological methods of study which have lately contributed so largely to the advancement of pathology and therapeutics. I have been led by my reflections upon animal heat and fevers to present certain views which I venture, in conclusion, to summarize in the following propositions:

1. Fevers, especially those belonging to the class of acute diseases, are self-limited in their duration, and are due each one to a special cause, a microörganism, the operation of which ceases after the lapse of a certain time.

2. We are as yet unable to destroy directly the mobific organisms which give rise to continued fevers; and we must be content, for the present, to moderate their action and to sustain the powers of resistance of patients.

3. The production of animal heat involves oxidation of parts of the organism or of food, represented in the formation and discharge of nitrogenized excrementitious matters, carbonic acid and water.

4. As regards its relations to general nutrition and the production of animal heat, water formed in the body by a process of oxidation is to be counted as an excrementitious principle.

5. Fever, as observed in the so-called essential fevers, may be defined as a condition of excessive production of heat, involving defective nutrition or inanition, an excessive production and discharge of nitrogenized excrementitious matters and carbonic acid, with waste and degeneration of the tissues, and partial or complete suppression of the production and discharge of water.

6. Aside from the influence of complications and accident, the ataxic smyptoms in fevers, the intensity and persistence of which endanger life, are secondary to the fever and are usually in proportion to the elevation of temperature. These symptoms are ameliorated by measures of treatment directed to a reduction of the general temperature of the body.

7. The abstraction of heat, by external cold and the reduction of temperature by antipyretics administered internally, without affecting the special cause of the fever, improve the symptoms which are secondary to the pyrexia.

8. In health, during a period of inanition, the consumption of the tissues in the production of animal heat, is in a measure saved by an increased production and excretion of water.

9. In fever, the effects of inanition, manifested by destruction and degeneration of tissue, are intensified by a deficient formation and excretion of water.

10. Alimentation in fever, the object of which is to retard and repair the destruction and degeneration of tissues and organs, is difficult mainly on account of derangements of the digestive organs; and this difficulty is to be met by the administration of articles of food easily digested or of articles in which the processes of digestion have been begun or are partly accomplished.

11. In the introduction of the hydrocarbons, which are important factors in the production of animal heat, alcohol presents a form of hydrocarbon which is promptly oxidized, and in which absorption can take place without preparation by digestion.

12. Precisely in so far as it is oxidized in the body, alcohol furnishes matter which is consumed in the excessive production of heat in fever, and saves destruction and degeneration of tissue.

13. The introduction of matters consumed in the production of heat in fever, diminishes rather than increases the intensity of the pyrexia.

14. As the oxidation of alcohol necessarily involves the formation of water and limits the destruction of tissue, its action in fever tends to restore the normal processes of heat-production, in which the formation, water plays an important part.

15. The great objects in the treatment

of fever itself are to limit and reduce the pyrexia by direct and indirect means; to limit and repair destruction and degeneration of tissues and organs by alimentation; to provide matters for consumption in the abnormal production of heat; and thus to place the system in the most favorable condition for recuperation after the disease shall have run its course."

ON THE CONTRACTIONS OF THE UTERUS THROUGHOUT PREGNANCY, AND THEIR VALUE IN THE DIAGNOSIS OF PREGNANCY, BOTH NORMAL AND COMPLICATED.

In a paper contributed to the Section on Obstetrics with the above title the author, Dr. Braxton Hicks, of London, offered the following conclusions:

I. During the whole pregnancy, the uterus contracts at intervals, varying much, but commonly from five to twenty minutes, remaining contracted for a variable time—from three to five minutes.

II. If we place our examining hand on the uterus at the time of contraction, the uterus will be firm, pyriform, and the fœtal parts not easily detected, in general. If we place our hand in a state of repose, or allow it to remain on till the firm condition has passed away, then the outline of the uterus is found indistinct, sometimes not to be felt at all; while the fœtal parts are more or less easily detected, and can often be pressed by the fingers into various positions.

III. By noticing these facts we are enabled with ease, in general, to decide as to the existence of normal pregnancy: to diagnosticate between this and various tumors, both uterine and abnormal pregnancies; between pregnancy and distention of the bladder, and other conditions easily recognized by the practitioner.

IV. These intermittent contractions have the physiological use of emptying the uterine veins and thus changing the highly carbonized blood for that more aërated.

V. From some observations he is inclined to think that there is some closely constant relationship between this highly carbonized blood-accumulation and the fœtal movements, and between the fœtal movements and uterine contraction.

VI. He can confidently commend to the profession this additional help in the diagnosis of pregnancy, one easily recognized and easily learned. In his own practice it has proved to be of the greatest service for many years.

ON THE USE OF HOT WATER IN THE TREATMENT OF EYE DISEASES.

In a paper read before the Section on Ophthalmology by Dr. Leartus Connor, of Detroit, Mich. with the above title, the author recommended the use of water as hot as could be borne, and stated that the temperature of hot water applications to the eye should never be less than 105° F. or more than 140° F. Temperature below 105° F. was absolutely injurious. The advantages of this treatment consisted in its cheapness, safety, and the fact that it can always be obtained. He believes that poultices should never be used to the eye, for many reasons, and that the hot compress is not so good as the plain hot water application. He recommends also the immersion of the eye in hot water by the inversion of a small tumbler which will fit in such a manner as to prevent leakaga over the face.

CONTRIUBUTION ON THE CAUSES AND TREATMENT OF SO-CALLED HAY FEVER, NASAL ASTHMA, AND ALLIED AFFECTIONS, CONSIDERED FROM A CLINICAL STANDPOINT.

From a paper read before the Section on Laryngology, by Dr. R. H. Thomas, of Baltimore, the following facts are obtained:

After passing in review the various conditions that have been thought to enter into the causation of hay fever and nasal neuroses, such as neurasthenia, obstructive and other diseases of the nasal passages and throat, and showing that while these were often present, they

LIBRARY OF THE COLLEGE OF PHYSICIANS AND SURGEONS, BALTO.

were not necessarily so in patients suffering from these disorders, the paper proceeded to discuss the question whether there are in the nose any special sensitive areas as has been claimed, the irritation of which will cause hay fever. The speaker gave the results of two series of observations which he had undertaken to satisfy himself on this point. The first series was to discover what sensitive areas could be found in those who were subject to some form of nasal neurosis. The observations were made between the intervals of the attacks. The result of this series was that, while, in every case, there is a sensitive area or sensitive areas to be found in the upper air passages, there is so much variety in the position of them that no portion can be set down as more generally sensative than another, though there was a slight preponderance in favor of the middle and posterior portion of the intra-nasal tissues.

The second series of observations was conducted on persons whose upper air passages were either normal or, if pathological, yet free from evidence of reflex phenomena. In these he failed to discover, as a rule, any reflex phenomena resulting from touching the various parts of the intra-nasal and pharyngeal tissues with a probe beyond the lacrymation and an occasional slight sneeze and a slight expiratory effort. This had led him to favor the opinion that no reflex sensitive area exists in the upper air passages in their normal condition. Hyperæsthesia is always present during an attack of hay fever, but this is very different from ordinary hyperæsthesia which often exists with no reflex phenomena.

The condition that gives rise to hay fever and other nasal neuroses appears to consist in a peculiar susceptibility either in the nerve ending or nerve centres, depending upon some structural disorder, which renders them liable to take on increased or perverted action when roused by certain stimuli.

These may be external, as pollen, etc., or meteorological changes, or the influence of psychical impressions may act as stimuli, or new growths or other morbid changes in the upper air passages, or the result may be brought about by irritation reflected from distant parts of the body.

The paper proceeded to dwell upon each one of these exciting causes, and then discussed the best method of treatment.

This must be constitutional and local. The constitutional measures should be addressed to the nervous system, such remedies used as arsenic, the valerianates of iron and zinc, syrup of hydrobromic acid, etc.

The local treatment consists of the cure of any co-existing intra-nasal or pharyngeal disease, the removal of any new growths, and then the cauterization of any areas that are found on examination to be peculiarly sensitive. The best method to carry out this indication is by the use of the gavano-cautery. The treatment should be mainly carried out *between* the attacks, though it is of importance to see the patient during the season as well. After some remarks as to the method of using the galvano-cautery, the paper concluded with the statement that when carefully carried out the prospect for cure is very good.

Cyanide of Zinc in Cardiac Cases.—Professor Lashkevitch finds that cyanide of zinc, or, as he terms it, "zincum hydrocyanicum sine ferro," has a peculiarly beneficial action on cases of palpitation and pain in the region of the heart, with want of proper rhythm, both when valvular disease is present, and also when the symptoms depend on some neurosis. In the latter case, however, the action is the more marked. In cases where digitalis, convallaria, and other drugs commonly prescribed in cardiac affections, appear to irritate the abdominal viscera, cyanide of zinc has shown itself particularly valuable. The dose is one-tenth to one-eighth of a grain (the Russian grain =0.0625 of a gramme, or 0.96 of an English grain). This quantity is usually ordered three times a day. A very few doses usually produce a perceptible effect.—*Brit. Med. Jour.*, August 20th, 1887.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, SEPTEMBER 17, 1887.

Editorial.

MEDICAL CONSULTATION.—We have, unfortunately, no record of the first consultation that was ever held, but it is a safe venture to suppose that it was called over some desperate or obscure case, and that the attending physician, being at a loss what to do, feeling that he wanted some light upon the subject, asked some man who he thought knew more than himself to come and help him. The student, the hospital interne, the very young practitioner all act upon this principle, which may be called for want of a better term, the common sense one, until they learn better.

They find that they were entirely mistaken about the principle of the *consultation*, that while they, in the innocence of their hearts had been led to believe that this *consultation*, this calling in of some distinguished man was intended for the benefit of the *patient* in reality it was for the benefit of the attending physician.

The case looks doubtful, and the family physician tells the fond husband or anxious mother that he would like his friend the eminent Dr. X, or Professor Y to meet him in consultation. At the appointed hour they meet, the distinguished man asks the attending physician what his diagnosis is, generally adding, as the symptoms are detailed that it clearly can be nothing else, walks softly into the room,looks at the patient, perhaps touches him, and, under certain circumstances, shakes his hand, professionally of course. After a few minutes conversation in an adjoining room about the patient perhaps, the two doctors return, the man of eminence tells the anxious relatives that his friend, who by the way may have called him in before, and might be likely to do so again, has made a very careful diagnosis, in which he, the eminent man, fully concurs, and that he can't see that anything more could be done than his friend has done. He then jumps into his carriage, not conscious, possibly, of having benefitted the patient much, but feeling, good, kind man, that he has acted the honorable part by the attending physician, and in addition earned a good fee; while the friend who called him in has a glow of satisfaction at the thought that nothing has been changed; diagnosis correct; treatment, ditto

This may be a gross exaggeration of most consultations, and it is to be hoped for the honor of the profession that it is. That there are a good many held in this absurd manner there can be no doubt. The laity have found it out, and many a satirical pen has pictured in manner most graphic, the conversation in the "adjoining room." Doctors talk of it, not now and then, but constantly, and certain men in every city are known as good men to call in consultation, because they always treat the attending physician so well, which being interpreted means, in most instances, that they examine the patient, and never make any but the most trival suggestions.

The fault lies unquestionably on both sides. The doctor who calls in a consultant, is generally anxious to have all his work confirmed; he wants, not advice, but commendation. And the consultant is afraid of hurting his friends feelings, if he ventures to suggest an examination of the patient.

We know that we are treading on ground thickly strewn with "chestnut burs" when we deplore this want of frankness, this lack of fairness, this degradation of a science into a trade, but it comes out so strongly in the consultation room that "something ought to be done."

If a physician feels that he has need

of a knowledge more extensive than is his own, of a nicer skill, of a bolder hand, let him have it by all means, but let him use it, and profit by it. If the man he calls in be a gentleman he need not fear that his patient will be lured away, but on the contrary will feel all the more confidence in him, knowing that when advice is needed it will be sought.

In a good many instances a doctor calls in some friend merely for form, to share the responsibility. This is, except under certain circumstances, an evidence of weakness, an unwillingness to stand up under the burdens that fall upon the shoulders of those who have entered a profession where burdens are "many and grievous." If a family have perfect confidence in their doctor, and he feels that he understands the case perfectly and there is nothing else that could be done, he should not call in some one merely to give him a little cheap flattery, but should be man enough to assume any responsibility that my devolve upon him. If he needs advice or if the family desire it, let him give the man whose assistance is asked every opportunity. Let him offer the patient for a thorough examination, and insist upon perfectly candid and straight forward expression of opinion. He is master of the situation and can act upon that advice in whole or in part as he sees fit.

On the other hand the physician who is called in council, should feel that he has a duty to perform, and is in honor bound to do it to the best of his ability. His opinion has been sought, and let us hope paid for, and whether his advice will be followed, whether his brother practitioner agrees with him or not, do not enter into, or should not enter into the consideration. His course is plainly marked out, and if he does not follow it, he fails to do his whole duty, and the money he receives for the supposed service—but this is far enough to pursue this aspect of the case.

A cablegram was sent to Dr. Morrell Mackenzie by the Section on Laryngology, congratulating him on the honor of knighthood conferred by the Queen.

Miscellany.

What the Journals and Prominent Men Say of the Congress.

New York Medical Record:—"The scientific work of the meeting was respectable, though falling much below the average of the two preceding Congresses. It is impossible to deny the fact that the representation of distinguished foreigners was extremely small; and the best contributions were decidedly from American physicians.

In conclusion, we venture the opinion, which must rise inevitably in unprejudiced minds, that the Ninth International Congress was far from being a failure, but still further from being a brilliant success. From an international point of view it was tremendously lopsided, being made up largely of the West, still more from the South, with a touch of the East, and a Continental sprinkle from Europe. The general character of it was as much as it had been predicted it would be. But it is over now, not without credit, and we trust that peace and harmony will reign."

Philadelphia Medical News:—"The number of persons actually present is upward of 2,500, and of these about 130 are from abroad. A number of the foreign members were registered by mail, and were not in attendance. The election as vice-presidents of a number of foreign gentlemen who were known not to be present, or even registered, was in opposition to all precedent, and was not a wise or dignified proceeding.

As to the character of the work done, the amount of new and valuable information which has been presented, and the probable influence which these will have on the science and art of medicine in the future, it is perhaps too soon to venture comment or prediction, but the opinions expressed by a few prominent men, which we print elsewhere, are interesting in this regard. The preliminary programme announced about five hundred papers as having been promised. Quite a number of these were not on hand when called for, but there were

many others offered which were not on the programme, and it is safe to say that each member of the Congress will be entitled to receive several very bulky volumes in the shape of its transactions, and that the editors of these volumes are not to be envied."

"A feature of the Congress has been the attention given to it by the daily press, and the likenesses given in Washington papers of men whom they consider specially worthy of honor, form a a collection which is unique in medical portraiture."

New York Medical Journal:—"The registration reported up to the time of our going to press shows that, as was anticipated, the Washington meeting of the International Congress is to be ranked among the largest gatherings of that body that have taken place. It is too early yet to make a final estimate of the success of the meeting from a scientific point of view; it can not even be said, prior to the closing days of the sessions, precisely who are to be present, as was aptly remarked by the president when the question was raised, on Monday, as to the expediency of electing absentees to office. It is probable, however, that almost all the foreigners who had made up their minds to attend were present at the opening of the proceedings.

The general addresses—those of them that have been delivered up to the time of this writing— have been of a character to command very general attention, especially in the printed form in which they will go before the profession at large. The president's inaugural address, which we publish in this number of the *Journal*, seems to us one of the most meritorious and praiseworthy literary achievements of a long life largely devoted to the interests of the medical profession as a body."

The Philadelphia Medical Register:—"The Ninth International Medical Congress—the Congress now in session in Washington—is without doubt a grand success in every respect. For this too much credit cannot be given to the Executive Committee, who have labored earnestly and continuously from the time that the authority was delegated to them to the present good hour for the results attained. To the Chairman of the Executive Committee and to the Secretary-General of the Congress is due the thanks of the American profession. Their work has been arduous, but they have at no time hesitated to sacrifice time and comfort in its performance."

The Journal of American Medical Association:—"The number of members registered on Wednesday night was about 2,800. The largest number registered at a previous Congress was 3,182, in London, in 1881. But at the London Congress 1,145 resident physicians were registered, while in Washington there are scarcely 400. But not alone in numbers is this Ninth International Congress a success: A glance at the programme of the Sections will show that as regards scientific value and interest it is second to no one of the preceding Congresses."

Dr. N. S. Davis says in point of numbers the Congress is second if not first. As to the character and the scientific value of its work he thought favorably of it. The conspicuous absence of distinguished foreigners, such men as Paget, Gull, Pasteur, Virchow and Lister, he attributed to age, professional duties at home, and the journey across the Atlantic.

Surgeon-General Hamilton thinks the Congress a great success. He thinks its scientific work entirely satisfactory and that it will take rank with any former Congress.

Dr. Semmola, of Italy, thinks the scientific work of the Congress below the average of any of its predecessors.

Food for Infants and Invalids.—The importance of a suitable diet for infants and invalids cannot be ignored by the practitioner of medicine. Diet is of equal if not of far greater value in the treatment of disease than medicine

and in many cases it is the one thing that is chiefly needed. To manage many cases with success paramount attention must be given to food. The question of its selection, preparation and mode of administration can not be delegated to friends and nurses. It must be given under the personal supervision and direction of the medical attendant. In many conditions the food ordinarily used in sickness will not meet the wants of the infant or invalid. A food must be selected which will digest, assimilate and nourish. Thanks to the ingenuity and labors of the manufacturing pharmaceutists such articles of diet are now easily obtained from the drug shop. Among the most reliable of these foods none stand higher than the Lactated Food. The nutritive elements of the three great cereals, wheat, barley and oats, combined with pure sugar of milk enter into the composition of this food. The result is a preparation which is easily digestible and highly nutritious and at the same time acceptible and palatable to the taste and enfeebled appetite. Another great desideratum is the comparatively low cost of this food. One dollar's worth of the Lactated Food will last an infant about four weeks. Our readers interested in dietetics are advised to write to Wells, Richardson & Co., Burlington, Vt., for pamphlet containing full information on this subject.

Epithelioma of the Umbilicus.—Dr. Barraud describes the case of a patient, forty years of age, who was admitted into the Hotel Dieu on February 8th for a tumor of the umbilicus. No hereditary antecedent could be discovered. She married when twenty-eight years of age, but never had any children, and had never been ill. Seven months previously, while taking a bath, she noticed a little scab over the umbilicus. On removing this she noticed a swelling, about the size of a lentil, of a wine-red color, and not ulcerated. She did not pay much attention to it until, in the course of two months, she remarked that the tumor had increased in size. She then consulted a medical man, who applied the actual cautery and dressed it with iodoform. Soon after, the tumor became rapidly bigger, and, three weeks since, it ulcerated and exuded small quantities of blood. The umbilical cicatrix was entirely invaded by a tumor about the size of a penny-piece, circular in outline, and projecting. The bottom of the ulceration was covered with granulations, and exuded a puriform, but not offensive, discharge. The tumor was firm and elastic to the touch, and could not be reduced. It was situated on a zone of induration, extending over a space about the size of the palm of the hand, and it appeared to send ramifications toward the abdominal cavity. The tumor was fixed in a vertical direction, but admitted of some lateral movement. No enlarged glands could be found. The general health of the patient was good. On examination the tumor proved to be a cylindrical epithelioma. The growth was removed by means of two curved incisions, meeting above and below the umbilicus. The mesentery was not involved, and no adhesions had formed. After removal, the lips of the wound were brought together and retained in position by means of deep sutures of silver wire and superficial horsehair sutures. Recovery was rapid and complete, and the patient was soon able to leave the hospital, provided with an abdominal belt as a support to the cicatrix. —*The London Medical Record*, July 15, 1887.

Phosphate of Sodium Hypodermatically in Phthisis.—Baratoux claims good results from the following:

℞.—Sodii phosphat 1 part.
Sodii sulphat 1 part.
Aquæ destill. 15 parts.—M.
S.—Filter before using.

Injections of from forty-five to ninety minims may be made once or twice weekly, in the sacro-lumbar region. These injections are followed by fever, cerebral excitation, and a feeling of fatigue for one or two days. A feeling of general improvement follows, the appetite returns, perspiration lessens, and expectoration loses its purulence. Gain in weight has been observed. — *Revue de Thérupeutique*, July 1, 1887.—*Med. News.*

The Endometrium in Disease of the Uterine Appendages.—Dr. Czempin has recently published some observations on the relation of the uterine mucous membrane to diseases of the appendages, in the *Zeitschrift für Geburtshülfe*. He compares primary disease of the endometrium, set up by gonorrhœal infection or puerperal sepsis, which enter the uterus from without, with secondary disease, the result of chronic affection of the appendages. In physiological processes a strong relation between the tubal and uterine mucous membranes can be observed, as in the formation of a uterine decidua in tubal pregnancy. A direct extension of inflammation from the tube to the uterus cannot be so readily proved during life. In relation to this subject, the sudden attacks of hæmorrhage observed in diseases of the appendages must be considered. The diseases where metrorrhagia is frequent are, first, chronic inflammation of the tubes and ovaries, often without symptoms until some circumstance causes aggravation of the disease; secondly, an exacerbation of old exudative parametritis; thirdly, pelvic irritation, especially such as may occur in the cicatrices of the pedicle after ovariotomy or salpingotomy; and fourthly, slow-growing tumours of the appendages, particularly pyosalpinx, and sarcoma or carcinoma of the ovary. Dr. Czempin rightly denies that endometritis must necessarily exist in all cases, and must be the cause of the metrorrhagia. Clinical evidence shows that in many such cases no uterine symptoms existed before the other disorders were diagnosed. Brennecke traced the reflex hyperæmia and hyperplasia of the endometrium near the climacteric to the disturbance of ovarian functions. In cases under Dr. Czempin's observations, not far from the climacteric, however, where this symptom existed, metrorrhagia existed where the ovaries were healthy, and the tubes or broad ligaments diseased. Dr. Czempin distinguished special characters in the metrorrhagia, which accompanied chronic diseases of the appendages. It was preceded by and commenced with very violent pain, on the cessation of which it continued to a moderate degree for some days. In all such cases inflammatory changes are found in ovaries, tubes or parametirum. On proper treatment of the primary cause the hæmorrhages disappeared; on the other hand, metrorrhagia from irritability of an operative cicatrix in the broad ligament, though more copious than the normal menstrual flux, was seldom preceded by any pain. Dr. Czempin traced this metrorrhagia to reflex congestion of the endometrium, due to irritation of the cicatrix, and did not believe that it was compensatory, in favour of the general organism, to menstruation, even after the removal of both appendages. The same observer discovered uniform thickening of the endometrium removed by scraping in cases of pyosalpinx, solid ovarian growths, and chronic oöphoritis, where the uterus was distinctly enlarged. In other cases the thickening of the endometrium was very slight; in others again there was no such change, though much metrorrhagia was present. In the latter the blood must have come from the hyperæmic tubal mucous membrane. The important researches of Dr. Czempin will throw some light on the puzzling questions in relation to the direction in which inflammatory diseases of female organs proceed. They must either be due to infection passing from the vagina through the uterine cavity and the tubes on to the surface of the ovary and into the peritoneum, or to infection entering the wound in the vagina or uterus and reaching the ovaries through the connective tissue, the peritoneum, or even the tubes being affected after the ovaries; or lastly, to some agency which causes primary inflammation of the ovary, the morbid process spreading from that organ to the tube, peritoneum, parametrium, and uterus. The subject is extremely intricate, and can only be solved by concomitant pathological and clinical study. —*Brit. Med. Jour.*, Aug. 20 1887.

Burial by Machinery.—An Austrian inventor is said to have devised a means of interment by machinery. The coffin,

instead of being lowered by the more or less clumsy means now adopted, is placed on a platform (the grave being concealed by black drapery), and by pressing a spring, the platform and coffin sink slowly into the grave.—*Medical Record.*

Medical Items.

A Branch of the British Medical Association is in course of formation in Tasmania.

The deaths of two more persons who submitted to M. Pasteur's treatment for the prevention of hydrophobia are reported.

M. Richet, Professor Agrégé, has been appointed Professor of Physiology in the Faculty of Medicine of Paris.

Dr. A. R. Robinson, chairman of the Section on Dermatology entertained the foreign and American dermatologists at Willard's Hotel.

By the courtesy of the Treasurer of the United States, the Treasury Vaults were opened each day to a limited number of delegates to the Congress.

The *Medical Register* with commendable enterprise issued a daily edition which contained a report of the Congress during its daily sessions.

Dr. von Nussbaum, of Munich, has recently performed his five-hundredth ovariotomy. The occasion was celebrated by his students with a banquet to the distinguished doctor.

Receptions were tendered to members of the Congress by Mr. John M. Glover, Secretary and Mrs. Whitney, Dr. N. S. Lincoln, Dr. A. S. Y. Garnett, Mr. Wilson and other citizens of Washington.

The excursion to Mt. Vernon on Friday was attended by quite a large number of delegates to the Congress. The excursion train to Niagara Falls left Washington on Saturday evening and returned the following Tuesday.

The President and Mrs. Cleveland it is said shook hands with more than three thousand physicians at the reception given to the Congress on Tuesday. The doctors paid numerous compliments to Mrs. Cleveland and the latter expressed some complimentary remarks about the doctors. It developed into a mutual admiration society.

Before the Section on Public Medicine at the Congress, Dr. Domingos Freire, of Rio de Janeiro presented a paper on his method of "Inoculation of Yellow Fever."

At the conclusion of the reading of this paper the following resolutions were adopted by the Section:

Whereas, inoculation against yellow fever, if it prove successful after further examination, is clearly beneficial to the human race throughout the world, and

Whereas, the facts presented by the experiment of Dr. Freire afford reasonable assurance of its protective influence in Rio de Janeiro.

Resolved, that this Section recommends coöperative investigation of the results obtained by yellow fever inoculation as protection against that disease, and that adequate preparations by the governments represented in this Congress be recommended, and that the matter be brought to the attention of the general sessions of the Congress.

The *N. Y. Evening Post* says: "There appears to be a great deal of ill feeling among the doctors assembled at the International Medical Congress because the Congress of the United States appropriated only $10,000 for the entertainment of foreign delegates. The truth of the matter is that the appropriation was $10,000 too much. Not one dollar ought to have been given to an associatien which has made such a public spectacle of itself as the American Medical Association has during the past two years. By making a fetish of its so-called "code of ethics," and giving it precedence over medical science and professional attainment, the Association cut off from the International Congress the great majority of eminent physicians in the United States, who as self-respecting persons declined to have anything to do with it. By cutting off these men of high repute and influence, it cut off all access to the purses of the wealthy classes in the Eastern cities, who would assuredly have given whatever money was necessary for the entertainment of the foreign delegates. But for the insulting behavior of the Association to the committee of which Dr. Billings was chairman, and the consequent withdrawal of the leading physicians all over the country, there would have been no need of applying to Congress for money at all. The cities of New York, Boston, Philadelphia, and Baltimore would have contributed enough, and more than enough, for every purpose of hospitality."

The American Gynæcological Association has been in session in New York during the present week. Quite a large number of foreign gynæcologists, including such names as Martin, Hewitt, Bantock and Apostoli, were present and took part in the discussions.

Artificial Immunity to Septicæmia.—MM. Charrin and Roger have studied the effects of subcutaneous injection of a septic vibrio on dogs. The microbe did not kill dogs as it killed rabbits and ginuea-pigs, but only produced a local lesion. Further, the first inoculation generally conferred immunity on the animal, the dogs operated on, with one exception, becoming refractory to a second inoculation. M. Chauveau states that these results are quite similar to those obtained with the microbe of gangrenous seticæmia, which he considers to be analogous to this septic vibrio. —*British Medical Journal.*

Original Articles.

AN ADDRESS IN MEDICINE.

BY A. B. ARNOLD, M.D.,

Professor of Clinical Medicine and Diseases of the Nervous System in the College of Physicians and Surgeons of Baltimore.

President of the Section of General Medicine, of the Ninth International Medical Congress.

The occasion, which gives me the privilege of addressing an assemblage of distinguished representatives of our profession, appears to me not inappropriate to cast a retrospective glance at the movements which exerted a dominant influence on medical practice of the present day. An inquiry concerning the extent and value of our therapeutical resources under changing circumstances, even if very imperfectly carried, out may not be deemed wholly uninteresting to the reflecting physician. The remarkable acquisitions of comparatively recent date in the different departments of medicine, but more especially the high degree of precision, which medical diagnosis has attained, and the invaluable contributions of pharmacology, by which therapeutics has entered the ranks of the exact sciences could not fail to tell heavily on many a traditional method of treatment and to weaken confidence in the efficacy of many a reputed remedy. Every cheer from our modern laboratories that hailed some brilliant discovery in the domains of physiology and pathology helped to unsettle the faith of the practitioner in the current system of therapeutics. It is a historical fact that Morgagni's and Rokitansky's revelations of the secrets of morbid anatomy caused such a thorough distrust, at least in Germany, of the official university teaching of medical science, that skepticism and nihilism became the fashion among the younger members of the profession. How could they, it was asked, still continue to direct their drugs to the cure of degeneratives and destroying lesions, being without any therapeutical means of controlling or arresting tissue changes. It was, of course, a substantial gain when forward speculations and dogmatism gave way to the true method of scientific investigation. Men of a practical turn of mind were at first little influenced by the new acquisitions, which appeared to demand a recast of accepted pathological theories. Others were loth to break with the continuity of medical doctrines on which the routine of practice was founded. But the strength of the influence which advanced views had exerted is best illustrated by the disgrace that befell the most universal and potent remedy, and which had the sanction of centuries of experience. Such was the fate of the lancet. It certainly did not require the demonstrations of pathological anatomy to show that there are incurable diseases; neither was it rational to underrate the value of therapeutical measures in deference to the microscope. The enlightened practitioner knows very well that the tentative and progressive spirit of science must inevitably cause fluctuations in theory and practice; but he is also convinced that medical art is in possession of sound and substantial means which enable him amidst all these changes to meet successfully numerous and dangerous deviations from health. A candid and competent criticism is evidently the only safeguard against the overweaning confidence in favorite therapeutical measures, as well as the best corrective of an irrational skepticism. As little as I am prepared to engage in such a task, it is nevertheless clear to my mind that it should embrace the subjects which I propose to touch upon, though at the risk of rehearsing what has been far more ably presented by others.

If there is one class of diseases of a well defined character in which unanimity of treatment might be fairly expected one should suppose it to be the large group of acute febrile diseases, which are self-limiting or rather show a tendency towards spontaneous recovery—*sit veniæ verbo.* I think I do not exaggerate when I say, that there is an English, a French, a German an Italian, a Spanish and an American treatment of fevers. Statistical tables showing the rate of recoveries under different modes

of treatmeut would lend themselves to no satisfactory decision, for the variable conditions and circumstances that influence the mildness or gravity of these diseases would obviously vitiate the result of a comparative calculation. It may, however, be safely asserted that the rate of mortality in fevers in general has steadily diminished during the last three or four decades. In order to narrow the compass of the inquiry in regard to the cause or causes to which this improvement is to be attributed it will be convenient to consider the therapeutics of typhoid fever. Now and then the medical world is tantalized for a short period by the promise of aborting this disease by a special manner of treatment. A far more hopeful event is the unabated effort to discover some remedial agent for subduing the febrile movements. Nearly all the so-called antipyretics, which have lately come into use, unfortunately possess the common property of overwhelming important nerve centers, when administered in adequate and continued doses. The artificial depression of the respiratory, the circulatory and thermic centres cannot be contemplated with indifference in patients struggling against the onslaughts of the fever poison. With all due deference to the favorable reports in regard to the fever treatment by these remedial agents, stronger proof than we possess is required to establish the reputation of their efficacy. If the elevation of temperature and the acceleration of the pulse constituted the only essential elements of the fevers and not merely their most prominent and constant symptoms, then the employment of antagonistic remedies might be reasonably considered to approach the character of a causative treatment. For the time being it must be admitted that the search for a rational therapeutics in the infectious fevers will be governed by the effort to alight on some agent or agencies that will control the febrile movements. Perhaps our successors will be more fortunate than we are in their endeavor to discover the antidotal treatment. Hyperpyrexia is undoubtedly itself a source of danger and deserves for this reason the most unremitting efforts to combat it with safety to the patient. Among all the measures adopted to this end, none seems to answer as well as the judicious abstraction of heat from the surface of the body. The promptness with which the cold water treatment fulfills this important indication is undeniable and if the harsh method of its employment be avoided it can neither be said to prove meddlesome, aggressive nor hazzardous. Those, who favor a so-called active treatment in acute fevers should be reminded of the history of the treatment of pneumonia, which reads like a commentary on mischievious officiousness. We moderns are no longer swayed by the fear of momentary disaster, to attack a pneumonia with all the therapeutical fierceness at our command. Trousseau candidly confessed, that long ago he "was tempted to leave nature to bring to a favorable issue the disease against which we are all disposed to act so vigorously, but that he had not dared yet to act." Our exuberant materia medica is somewhat to blame for the fashion of piling drugs upon drugs; though it might be asked, what are they good for, if not prescribed? But inconsiderate medication is principally due to the false conception of what constitutes expectant treatment. The old physicians are often criticised for their crude theories of disease and their easy faith in accredited remedies. As an offset, however, they taught certain practical maxims which no physician even of the present day can afford to neglect. They advised to watch the complications, to attend to the secretions, to support the patient and to obviate the tendency to death. These excellent precepts contain the very gist of the expectant treatment. In view of the limits of our therapeutical resources in the acute fevers, such a plan of treatment seems the only rational one, and suffices to satisfy professional conscience. There is one part of it which is absolutely remedial and productive of positive good. This must be conceded to faithful and skillful nursing, including a well ordered diet and the strict observance of hygienic rules. The

physician, who has a profound respect for the recuperative powers of nature under favorable circumstances will be extremely careful in the use of coercive measures. There is a conservative medicine, as well as a conservative surgery.

It is rather late in the day to discuss the supreme importance of hygiene and sanitation, not only as prophylactic measures but also as invaluable adjuvants of therapeutics. Preventive medicine, which has now been fairly inaugurated, is the great glory of our profession in these days, an event which will be signalized as the dawn of a new epoch in the history of our art. The remarkable improvement, which is sometimes witnessed in diseases of a fatal tendency in consequence of a change of regimen, diet and general mode of living is calculated to make a deep impression on the medical observer. Balneology teaches many an instructive lesson of the same import. Vital statistics also tell a plain story. After giving due credit to improved methods of treatment it must be admitted that a great share in the reduction of the death rate in modern times must be attributed to the ameliorated condition of the less favored classes of the population and the increased attention which legislation devotes to the comforts and health of the laboring masses. The decrease in the morbility of factory hands in the large and numerous establishments of England according to the reports of the Registrar General, is mainly due to the passing of laws which diminishes the hours of labor and prohibit the employment of children at a certain age. No other influence had a more decided effect in bringing about a change in the factory laws of that country than the constant agitation of this subject by the medical press.

The reminder to attend to the *indicatio causa* comes now with a better grace than formerly since microscopic anatomy and the achievements of physiology enable the clinician to fill up many gaps in the interpretation of symptoms. Text-books have long ago dropped their separate chapters on dropsies, hæmorrhages, jaundice, essential paralysis and the like. The work is still going on to change clinical into anatomical diseases. But therapeutics has not kept pace with these conquests. Our power of knowing is vastly in advance of our power of doing. The whole stock of our materia medica with very few exceptions consist of remedies which are avowedly employed either to palliate, to subdue, or to evoke a symptom. The physicians of a past period thought they had a class of medicinal substances which influenced nutritive changes. They called them alteratives of which calomel held the first rank. Perhaps we have been too hasty in our disparagement of such a claim. Absolute causal treatment is at any rate the prerogative of surgery. Chirurgical art in modern times has wrested many an inch of ground from the domain of medicine, but these conquests are limited to those portions of it, which had rightfully belonged to surgery. Specialism, in the departments of ophthalmology, gynæcology and laryngology would have celebrated far fewer triumphs had it not been for the introduction of novel surgical procedures. We can appreciate the satisfaction with which the neurologist contemplates now the use of electricity as an important acquisition to his meagre therapeutical resources. It is significant that the remedial powers of this physical agent are solely due to its action in *loco morbi*.

The general practitioner encounters his old foes now under the designations of sclerotic, cirrhotic and other forms of degeneration with far less confidence in his ability to cope with them than he did formerly. He cannot stand idly by until some lucky chance or a pharmacological wonder shall supply him with a specific, though he would probably give a whole volume on cellular pathology for a single compeer of quinia. He therefore continues to do precisely what his predecessors did under similar circumstances. He tries to relieve pain, to remove a dropsy, to check a hæmorrhage and to improve a palsied limb, whatever may be the known or unknown cause. It is not only in cases

belonging to the category of progressive and fatal diseases that a symptomatic treatment or even a crude empiricism is in its place, but necessities occur which urge the physician to strain the resources of his art for no other consideration than to afford momentary relief of only a single symptom. Traube's language on this subject is to the point. He says: "the endeavor to remove a symptom whose persistence endangers the life of the patient or threatens to prolong the disease, or increases suffering is as rational as any other therapeutical intention provided the purpose can be accomplished." Sometimes a favorable change is produced or the course of the disease is favorably influenced on successfully contending against a conspicuous symptom. Every experienced physician will coincide with this observation. Perhaps it is by a process, which may be recognized as reflex action, that symptomatic treatment not seldom brings a disease to a favorable issue. It is now generally believed that hydropathy chiefly owes its therapeutical effects to the reflex action of the vaso-motor nerves. There is an aspect of symptomatic treatment which may be conceived to go beyond its original intention. No valid reason could be advanced against the supposition that structural changes may be modified by remedies which exert a specific influence on the functional activities of organs.

Pathological theories, despite their fluctuations will continue to control practice. The currency they gain in the medical world is generally accepted as the warrant of their truth. This will always be so, for theory and science are inseparable. Inexplicable facts do not constitute science. Post-mortem appearances become scientific facts in so far as they lend themselves to the construction of theories which profess to explain the seat and nature of the morbid processes that gave rise to them. The knowledge which is thus gained although it may only be of an approximative kind can be made available for practical use. Strange as it may sound, there is a surfeit of facts in medicine and a dearth of good working theories. Bacterio-pathology, which is founded on a fair induction, is the most noteworthy theory, which the industry and ingenuity of experimentation of modern cultivators of medical science has brought forth, though there are signs ahead that indicate a tendency to give it a too sweeping significance. Theories of disease based on the results of etiological investigations are certainly of preëminent value. Beyond question etiology is the most obscure chapter in the whole of medicine, but its successful study is of incalculable practical importance.

That nature often cures disease expresses but an insipid truism. If we only knew how nature does cure. An acquaintance with her methods offers the chance of supplementing them when they are deficient, or to evoke them into action when they are not forthcoming. Physio-chemical investigations have disclosed many of the secrets of the *vis medicatrix naturæ*, and clinical medicine has always profited by the knowledge which they afforded. Many of the names applied by the old physicians to certain classes of remedies implied their supposed physiological effects. They had their excitants, depressants eliminants, resolvents, revulsives and robersants. This classification is probably imperfect but in principle it is sound. Every new insight into the nature of a physiological process brings into nearer view its pathological correlative and suggests a fitting therapeutics. Thus the artificial preparation of peptonizing ferments and the adoption of an improved dietary is due to the better understanding of the character and function of the gastro-intestinal secretions. The tendency at the present day towards physiological medicines has not escaped the criticism directed against experimentation in place of bed-side observation. But this criticism in untenable, for it is not only requisite to know the therapeutical properties of the remedies we constantly employ, but it is also highly desirable to increase our stock of useful medicinal agents, and this is best accomplished by experimentation. Moreover, it would conduce greatly to the honor and credit

of medical science if the mystery surrounding the action of our specifics and empirical remedies were laid open to us. Were it not, that the fallacy of the *post hoc* reasonings must always be taken into consideration, there would be no appeal from the dictum of personal experience in reference to the therapeutical value of any remedy. The extreme difficulty of entirely eliminating this fallacy practically throws this demurrer out of court. The license, which is thus conceded to the assertory judgement of the individual practitioner is one of the weakest points in therapeutical science. Virchow has somewhere remarked, that therapeutics continues to be the only department of medical science which is tolerant of rubbish. Things have much improved since these words were written. Systematic writers should now be released from paying their kind regards to the faded reputation of many a drug that had enjoyed the suffrage of our predecessors.

At one time it was thought that the numerical method offered the only trustworthy criterion of the comparative value of modes of treatment. Practice might then be reduced to the simple empiricism of selecting that therapy in a certain disease, which had been found of greatest benefit in the largest number of cases. Science and art would occupy a very subordinate place in such a scheme of practice. The treatment on the average principle would reverse the rule of treating the patient and not the disease. The numerical method is nevertheless the only way of judging the rate of mortality under different plans of treatment. Apart from the variability of the extrinsic and intrinsic causes that influence the mildness or gravity of disease, every distinctive group of diseases is characterized by a constancy of morbid conditions. This sameness of the pathological factors in all the cases of the group neutralizes in a great measure the source of fallacy which attaches to the numerical method. In actual practice extensive use is made and properly so of preferring that plan of treatment which shows a low death rate.

It is hardly conceivable that scientific rules, however comprehensive and unassailble shall ever supersede the display of tact and judgement of the skillful physician. The practice of medicine will never cease to be an art as long as pathological doctrines remain incompetent to indicate an adequate therapeutics. There seems to be an incompatibility between art which is a personal incommunical gift and science which is universal and founded on proof and demonstration. In reality there is no such an incompatibility if by art we do not imply a sort of divination. There is no walk in life demanding a greater amount and diversity of knowledge than the practice of medicine. But it is not only this wide range of studies and infinity of technicalities which the physician is called upon to make his own; clinical expertness requires the cultivation and exercise of the highest powers of observation, and a deep psychological insight.

The physician in the discharge of his professional duties, has to combine warm sympathies with the sternness of an unyielding authority. He has to remain honest though a little charlatanry be required to secure the confidence of his patient. He has to exhibit a patience which nothing can exhaust; he has to compete with pretension and imposture. During his whole career, usage imposes upon him a profound silence concerning his professional exploits. His heroism in facing the dangers he encounters is valued no higher than his fee. God bless the enlightened, conscientious, noble-hearted physician—he needs it.

PRACTICAL NOTES ON DISEASES OF THE RECTUM.

BY S. T. EARLE, M.D.,

Professor of Rectal Surgery in Baltimore Polyclinic and Post-Graduate Medical College.

(*Continued from August* 27, 1887.)

PROCTITIS.

Inflammation of the rectum alone is rather a rare affection and can nearly

always be directly attributed to some known irritant acting locally. It may exist either in an acute or chronic form. The former is attended by a sensation of intense burning in the rectum, with frequent and distressing tenesmus, and discharges of mucus, streaked with blood, frequent desire to go to stool, attended with excessive straining, dysuria and sometimes retention of urine. Upon introducing the finger in the rectum it will be found hot and dry, if done during the early stages. After the excessive secretion of mucus has come on the finger would scarcely recognize any abnormal condition of the parts, except perhaps the swollen mouths of the follicles which appear as little elevations on the mucous membrane when seen through the speculum. The examination should be made with the small gorget speculum to avoid as much pain as possible. It shows the mucous membrane to be very red, and if the inflammation has existed for several days in an aggravated form, to be denuded of its epithelium, and studded with minute elevations, the swollen mouths of the follicles. The examination with either the finger or speculum is attended with considerable pain. The symptoms resemble very much those found in fæcal impaction, from which it is readily diagnosed by the digital examination. It is differentiated from dysentery principally by the peculiar character of the pain, which the patient describes as an intense burning and not a pain; by its location, being confined to the rectum and sacral region, and by the absence of severe constitutional symptoms. If the exciting causes are removed the inflammation subsides very readily under appropriate treatment, but is likely to go on to ulceration if the exciting causes are continued. It would be proper here to speak of the specific forms of acute inflammation. There are only two that need be mentioned; the gonorrhœal, which is very rare, and may result either from the habit of pederasty, or by auto inoculation, where the gonorrhœal pus runs down from the vagina over the anus; the second is tubercular, three cases of which are mentioned in a paper by me to be found in the MARYLAND MEDICAL JOURNAL for December 4th 1885. They are generally found in advanced cases of general tuberculosis and it is unquestionably the primary stage of general tuberculosis of the rectum. In them in addition to the intense redness and hyperæmia generally found, there are minute points of ulceration. The chronic form prevails generally in old people, in broken down subjects in earlier life, and is an attendant of protracted cases of prolapsus recti at all periods of life, in which case it involves all the coats of the lower rectum, and results in hypertrophy of its walls. The symptoms are very much the same as those in the acute form, except they are much less marked. It may be so mild in form as scarcely to attract attention, except when there is added an acute attack which is likely to be lighted up from time to time by different exciting causes. I have recently seen one such case where it has evidently existed for years, but the patient would only apply for medical advice when the acute attacks would be superadded.

Causes: Any local irritant sufficiently strong, and that has been continued sufficiently long; the most common are foreign bodies that have either been introduced from without, or taken with the food by the mouth and finally have lodged here, such as bones etc. (I have seen a case where small fish bones had been swallowed in large numbers and lodged in the rectum, where they had produced sufficient irritation to expel all the fæcal contents in fluid form, but they had been retained and formed a mass which reminded me very much of a wire gun swab; they were removed piece-meal with considerable difficulty, when the irritation soon subsided), irritating enemas, direct violence and specific poisons. I do not, however, believe that fæcal accumulations are ever, if so, rarely ever, a factor in its production, although it is generally considered to be. I have seen on the post-mortem table a case of fæcal impaction which had existed so long and exerted so much pressure as to produce a small slough that corresponded exactly to one

of the protuberances found on the fæcal mass, while the surrounding mucous membrane to within a quarter of an inch of the slough was free from all appearance of inflammation; such I think is a far more frequent result of fæcal impaction.

Treatment: Of the acute form first a thorough search for and the immediate removal of the exciting cause, if any exists and can be removed; the recumbent position should be maintained continuously, the patient should be made to use the bed pan when wishing to evacuate his bowels in order to avoid as much as possible tenesmus, the diet should be mild and of such a character as will leave as little residuum as possible to be excreted; large warm water enemas to be administered three or four times during the twenty four hours, the water to be as warm as can be borne without causing much discomfort; and suppositories of opium gr. i or ii. or ext. belladonnæ gr. ss to j to be used every 3 or 4 hours, or as often as is necessary to insure rest and comfort in the rectum. If the burning pain is very intense muriate cocaine gr. i. may be added to the suppository of opium and belladonna in order to get more speedy relief from the pain. The chronic forms require a stimulating and astringent form of treatment. About every third day use an injection of argenti nitras gr. x. to ab. destil ℥j., all of which is to be injected at once, after having first washed out the rectum thoroughly with an injection of warm water; this to be continued until the case shows some decided improvement. In the interim use from twice to thrice daily injections of a decoction of hamamelis virg. The bowels should be kept perfectly regular without being unduly irritated by small doses of soc. aloes administered at bed time, which also acts as a beneficial stimulant to the rectum. If there is much tenesmus it may be relieved by suppositories containing only small doses of opium and belladonna. Gonorrhœal proctitis is best treated by injections of hydrarg. bi-chlo. 1–5000 four or five times daily in addition to other means recommended in acute simple proctitis. The condition spoken of as being found in advanced tuberculosis can only be paliated by anodines administered by suppositories.

Society Reports.

OBSTETRICAL SOCIETY OF PHILADELPHIA.

STATED MEETING HELD SEPTEMBER 1, 1887.

The President THOMAS M. DRYSDALE, M.D., in the chair.

PLACENTA PRÆVIA CENTRALIS.

Dr. R. H. Hamill presented the specimens and related the history of the case. I was called August 13, to see Mrs W., aged 40 years, mother of three children and now in the seventh month of gestation. During the first and second months she had a slight "show" on three or four different occasions. She then saw nothing until the middle of the sixth month when she had quite a "gush of blood" during the night without any pain whatever. She did not consult a physician at this time, as she attributed the hæmorrhage to having worked somewhat harder than usual during the preceding day. Four weeks afterward, which was in the seventh month, she had a repetition of the hæmorrhage losing a much larger quantity. She became quite alarmed and sent for me. The hæmorrhage had entirely ceased before my arrival. I made a vaginal examination and found the external os patulous and the internal rigid. A slight discharge of blood continuing, I requested Dr. B. C. Hirst to see the case with me, to consider the question of inducing labor. We found the patient having a copious flow of blood. The os was slightly dilated and was completely covered by the placenta. The woman had no pain but was becoming faint from loss of blood. We desired to bring on labor at once. The patient was etherized and the os dilated and three fingers passed through the substance of the placenta. I found the fœtus lying across the transverse axis

of the brim of the pelvis. I succeeded in bringing down one foot and proceeded to deliver. There was no difficulty until the head became engaged, and it was with the greatest effort that we were able to extract it. The child was still born owing to the length of time we were in extracting the head. We then delivered the placenta with ease. The uterus at once became firm and hard.

The points of interest in this case were to me 1st, the central implantation of the placenta. 2nd. the fact that the hæmorrhage began so early in pregnancy. 3rd. the difficulty in delivering the head, which I think was due to the placenta so filling up the pelvis that the diameters were so reduced as to materially retard the delivery of the head.

Dr. Longaker remarked that the most favorable statistics show from 40 to 45 per cent. of children saved. Hæmorrhage early in the pregnancy usually indicates a central implantation of the placenta and labor should be induced in such cases. Immediate delivery by traction on the leg is to be condemned. The breech is a perfect tampon and after one leg is brought through the placenta the case may be left to nature. The hand should not be passed into the uterus, but the placenta should be perforated by one or two fingers and bipolar version effected. If traction on the leg and rapid delivery be effected a bad presentation of the head at the superior strait will result and the cervix will not be sufficiently dilated by the body to allow the head to pass quickly and the child becomes asphyxiated. The average result of rapid delivery is unfavorable. The maternal mortality is from 10 to 40 per cent.

Dr. Hamill did not think the delivery in his case too rapid; traction on the leg was made because nature was exhausted and was not able to deliver the child without assistance.

ACUTE PNEUMONIA IN UTERO.

Dr. B. C. Hirst exhibited the specimens and remarked that pneumonia during intra-uterine life is rare but has been observed: Dr. Stischam, of Australia, *British Medical Journal*, 1887, II, p. 860, has reported a case, and Dr. Sigl, of Germany, *Arch. f. Gynäk.* Bd. XV. S. 384, has collected three others. Sigl's explanation is undoubtedly the correct one for this occurrence. If the fœtal blood is not properly ærated, the respiratory centre in the brain is stimulated to action by the excess of carbonic acid gas in the blood and the fœtus makes inspiratory efforts drawing into its lungs amniotic fluid, containing in these cases possibly meconium, and a catarrhal pneumonia is the result ending usually in the death of the fœtus, either in utero or shortly after birth. These cases are to be distinguished from those in which the fœtus draws into its lungs amniotic fluid, mucus and blood during labor. The specimen which I exhibit to the Society has the following history: These lungs were taken from an infant which died twenty-two hours after birth, having been cyanosed from the first. The mother had had a large lumbar abscess for the past year and when she come under my observation in the Philadelphia Hospital in the sixth month of pregnancy, exhibited all the signs of general septicæmia. She gave birth to her child at the seventh month of gestation. The post-mortem examination of the infant showed no other cause for death except the pneumonia involving both lungs, which must have arisen in utero, as the labor was easy and rapid, and there was no reason to believe that the child made inspiratory efforts during its expulsion. The microscopic slides which are exhibited confirm the diagnosis. They show well marked catarrhal pheumonia.

Dr. Hirst also exhibited an

ECTRO-MELIC MONSTER.

This fœtus expelled in the fifth month presents, if one adheres strictly to the classification of Geoff. St. Helaire, only a deformity by numerical diminution, consisting in the absence of the left femur and four toes of the left foot. Its appearance, however, is certainly monstrous and I have ventured to classify it among the ectro-melic monsters (ectrometic—aborted limb).

Dr. J. C. DaCosta narrated a case of

RAPID DEVELOPMENT OF A FIBRO-SARCOMA OF THE UTERUS.

The patient came under his care three years ago for catarrhal metritis, the uterus being sharply retro-flexed and the posterior wall being bulged as if an interstitial fibroid were present. These conditions were all cured by the use of sponge tents. About the middle of last May she was attacked with a profuse metrorrhagia lasting ten or twelve days, fungous vegetations were removed by means of the curette. The June period occurred normally on the 22nd, but a recurrence of the bulging in the posterior wall was noticed. She went to the sea-shore but returned on July 22nd, wornout, thin, and with white anæmic lips. She had a serous discharge from the vagina for the last twelve days. Her condition had been diagnosticated as "fibroid and ulcerated cervix." The os was large as a five cent nickel. The cervix was filled with a pultaceous mass which was extruded by the free use of ergot. On July 25th, Dr. Da Costa removed, from the body of the uterus, a tumor three inches long by two inches thick, a fibro-sarcoma which had grown inside of thirty days. The patient recovered.

Dr. Drysdale thought this very rapid. These tumors were likely to recur.

Dr. Joseph Price exhibited a specimen of

ABSCESS OF BOTH OVARIES.

In his experience it has been a common condition. He has operated in four such cases within three months. This case had escaped unoperated upon from Birmingham. Pus was present in both tubes. The operation was a complete enucleation without ligature.

Dr. Price exhibited a "cotton rope" or wick which he used in drainage tubes it becomes filled with blood, serum, etc., and is replaced with clean one two or three times a day. It keeps the opening clear and favors discharge of fluids.

Correspondence.

A MUCHLY DISEASED MAN.

A correspondent sends us the following report:

Editor Maryland Medical Journal:

DEAR SIR:—In casually looking over the report of deaths. I came across the following one which I give verbatim.

First Primary—post-mortem, aortic aneurism, enlargement of heat, enlargement of liver, double lung adhesions, tumors and ulceration of the transverse colon, lungs, etc., chronic erysipelas, chronic rheumatism, ulceration of legs, etc., Bright's disease, right kidney floating secondary cause of death, general adynamia.

ABSTRACTS AND EXTRACTS.*

AN INVESTIGATION TO DETERMINE WHETHER THE ABSENCE OF SEWERAGE AND OF WATER-POLLUTION DIMINISH THE PREVALENCE AND SEVERITY OF DIPHTHERIA.

In a paper read before the Section on Diseases of Children, Dr. Charles W. Earle, of Chicago, presented the results of a study of the causes of diphtheria in localities remote from sewer-gas influence in the less thickly populated Western States and Territories. He had received communications from a large number of physicians widely scattered over this great region.

His conclusions are briefly summarized as follows:

"1. Diphtheria occurs in the mountains and prairies of the great Northwest with the same malignancy as in the East.

2. And with equal virulence in vicinities remote from sewers.

3. When once introduced, the residents of damp sod houses suffer with marked severity.

4. The infection is transported thous-

*Selected from Papers and Addresses read before the Ninth International Medical Congress.

ands of miles in some unrecognized vehicle.

5. There is abundant testimony that it follows the lines of railroads and steamers, making it imperative to increase the watchfulness and improve the methods of disinfection by railroad and steam-boat companies.

6. The desirability of legal enactments obliging people of all classes to recognize their responsibility in regard to the control of contagious diseases."

THE PREFERABLE CLIMATE FOR PHTHISIS.

In the Section on Climatology and Demography, Dr. Charles Denison, of Denver, Col., read a paper on the above subject. Dr. Denison believes that the climate to be preferred for the great majority of consumptives in the United States varies from between fifteen hundred feet elevation in the North in winter to ten thousand feet in the Southern portion in summer. Certain contraindications exist against sending consumptive patients to high altitudes. The most prominent of these are advanced age of the individual; an excitable, nervous temperament; valvular lesions, with rapid action of the heart; marked and extensive emphysema; pneumothorax and hydro-pneumothorax; active pneumonia or hæmoptysis; high bodily temperature; extensive involvement of lung-tissue, and similar conditions.

He takes the affirmative side of the following five divisions named in the order of their relative importance: (1) Dryness as opposed to moisture; (2) coolness or cold preferable to warmth or heat; (3) rarefaction as opposed to sea-level pressure; (4) sunshine as opposed to cloudiness; (5) variability of temperature as opposed to equability.

THE SEASONABLE PREVALENCE OF PNEUMONIA.

Dr. John William Moore, of Dublin, Ireland, read a paper before the Section on Climatology having the above title. He offered the following conclusions: Pneumonia has claims to consideration as a specific fever on the following grounds:

"1. Its not infrequent epidemic prevalence, which is beyond dispute.

2. Its proved infectiveness.

3. Its occasional pathogenic origin in many cases.

4. Its mode of onset or "invasion," which exactly resembles that of the recognized specific fevers.

5. The appearance of constitutional symptoms before the development of local signs or symptoms.

6. The critical termination of the febrile movement in uncomplicated cases.

7. The presence of local epiphenomena in connection with the skin, as herpes, taches bleuâtres, and desquamation.

8. The development of sequelæ in some cases, such as nephritis, followed by renal dropsy and other conditions.

9. The discovery of a probable pathogenic bacillus, to which analogy points as pathognomonic."

THE MODERN TREATMENT OF UTERINE CANCER.

In the section on Gynæcology Dr. A. Reeves Jackson, of Chicago, read a paper having the above title. Dr. Jackson offered the following conclusions:

"1. Any operation for cancer which does not completely remove the disease will be followed by recurrence.

2. During life the limit of cancerous disease originating in any part of the uterus cannot be known; hence no operative procedure can guarantee complete removal.

3. In view of this fact, no operation is justifiable which greatly endangers life, provided other and safer methods are available.

4. Vaginal hysterectomy is more dangerous, in a certain sense, than the disease against which it is used; that is, a given number of patients afflicted with uterine cancer will live longer without than with the operation.

5. Other methods of treatment, attended by not more than one-sixth to

one-fourth the mortality of vaginal hysterectomy, are equally efficient in ameliorating the symptoms and retarding the progress of the trouble, and they have been followed by as seemingly good results as regards recurrence. Hence they should be preferred.

6. Vaginal hysterectomy does not avert or lesson suffering; it destroys and does not save life. It is, therefore, not an useful but an injurious operation, and as such is unjustifiable."

In the Section on Ophthalmology Dr. J. F. Fulton, of St. Paul, Minn., read a paper entitled the

ADVANTAGES OF EARLY OPERATION IN STRABISMUS,

in which he spoke of the difficulty of overcoming diplopia or amblyopia where they exist after operation. He agreed with Solberg Wells that suppression of the image results in amblyopia from disuse where the trouble occurs in children, and even in cases where the difficulty is of a later date. He favors operating in children at an early date. If operation is not admissible, then the other eye should be covered, and the squinting eye exercised carefully at short intervals. Amblyopia met with in strabismus is either primary or secondary. If primary and congenital nothing can be done, but he thought many cases were secondary and due to the same cause as the squint. The vision of the defective eye sometimes rapidly deteriorates when the image is suppressed. A case in point was one where V., $= \frac{20}{20}$ in the right eye, and $\frac{20}{30}$ in the left was raised to normal by a suitable glass. Some time after the fixing eye was lost by accident, when the left eye was found to have only $\frac{20}{80}$. This was raised, after use for some time, to $\frac{20}{30}$. Other cases were quoted, one of two members of the same family, one of whom was operated on, with the result of improving the vision from $\frac{20}{40}$ to $\frac{20}{30}$, while in the other, which was let alone, the degree of strabismus remained stationary, but the amblyopia increased.

VAGINAL HYSTERECTOMY, SIGMOIDOSTOMY, AND CHOLECYSTOSTOMY.—These operations are slowly but surely gaining ground, and those surgeons who have either performed them or seen the results of the operations of others, are fully impressed with their value. Excision of the uterus through the vagina for cancer, whether of the body or cervix, if undertaken sufficiently early, offers quite as much hope of cure as radical operations for the same disease in other organs, and its mortality, in experienced hands, is very small. It is, however, necessary to insist that all cases should be very carefully examined some days before operation, to ascertain that the disease is limited to the womb, and that no one should undertake it without repeated practice on the cadaver, and without having seen it performed by a good operator. As Fritsch, who has operated sixty times, very properly says, the operation is difficult and tedious even to an expert. Inguinal colotomy or, as Mr. Reeves, who was the first to introduceit in this county, prefers to call it, sigmoidostomy, is becoming quite the fashion, and as the reasons for this preference were pointed out several years ago in our pages by that surgeon, it seems strange that so long an interval has been allowed to elapse by surgeons before adopting it. By it the risks of the lumbar operation are avoided, and the mortality is practically next to nothing. In his lectures on diseases of the rectum, at the Hospital for Woman some years ago (1881), Mr. Reeves suggested a mode of operattion in cases where it might be necessary, entirely to shut off the lower end of the bowel, by dividing the gut, invaginating and stitching together the serous surfaces of the lower portion after thoroughly cleansing its lumen, and then returning it, while the upper end should be stitched to the inguinal opening, to form the artificial anus. Cholecystostomy—improperly called cholecystotomy—has not, it appears, proved very successful in London, therefore we shall shortly publish records of five cases operated on by Mr. Reeves; four of which were done

for gallstones, and were successful, and one for cancer, which succumbed. In this case the diagnosis was difficult, and the jaundice and biliary colic were thought to be due to impacted calculus. Two cases of extirpation of diseased and enlarged uteri *per vaginam* under the care of the same surgeon, presenting many features of pathological and surgical interest deserve record and will be published, with illustrations, in the journal. The last case which was one of cancer combined with pregnancy, made a rapid recovery.—*Brit. Med. Jour.*

Treatment of Syphilis by Hypodermic Injections.—In France at the present time the various methods of treating syphilis by hypodermic injections are the order of the day. There is a great diversity of opinion as to the relative merits of hypodermic and other modes of administering mercury. Besnier has experimented largely with the hypodermic method at the St. Louis and has practically abandoned it. At the Hôpital du Midi and the Lourcine the subcutaneous method is still largely used. Du Castel at the Hôpital du Midi employs injections of calomel suspended in oil of vaseline; each syringe, ful represents 10 centigrams of calomel; one-half this quantity is employed the first time and the entire quantity is injected at each subsequent sitting, which should be at intervals of eight days. The injection is carried down deep into the muscles of the buttocks. Considerable pain is experienced from a few hours to three or four days after the injection; abscesses rarely occur; nodules and phlegmons, sometimes large and brawny, may be felt at the seat of the injection. Balzer employs at the Lourcine the yellow oxide (ten centigrams to 1 gram of oil of vaseline), the mercury being perfectly pure and washed several time in boiling alcohol. These injection are repeated every ten to fourteen days. It is claimed that syphilitic manifestations disappear more rapidly and are less liable to recur under this plan of treatment. I have observed quite a number of cases in which this treatment was of doubtful value. I saw two patients who had developed stomatitis, one quite severe, after the second injection, and several cases proved absolutely refractory, the lesions persisting, notwithstanding the long-continued use of the injections. Balzer and Du Castel regard this method essentially tentative as yet. Martineau at the Lourcine is quite enthusiastic over his method by the use of the ammonio-peptonate of mercury. He assured me that its superior value had been established by his treatment of over 6,000 patients in whom he had made over 200,000 injections. These injections are very painful and are employed every day as a rule. I saw Smirnoff, the distinguished Russian advocate of the hypodermic treatment of syphilis, with Mauriac, at the Hôpital du Midi. His method of making the injections differs somewhat from that employed by the surgeons here.

From quite an extended personal observation of the results of the hypodermic method, my own impression is that it will never supplant the older and more classic modes of introducing mercury into the system. Its alleged advantages of accuracy and precision of dose, rapidity of action, avoidance of stomatitis, while securing the maximum benefit from a minimum quantity of mercury, are still *sub judice*.

On Sunday last I dined with Fournier at his charming country place in the suburbs of Paris. In the course of conversation, I took occasion to ask his opinion as to the merits of the method in question. While conceding its possible advantages in certain exceptional cases, he does not employ it. "My advice is that it is not a good treatment. You must give your patients a treatment which will please, or, least, not displease them. The injections are painful, they interfere with the patient's avocation, they necessitate frequently repeated visits. Above all, the method is not practicable. In private practice patients will not tolerate it. In hospital practice it is possible, but note the result: Patients leave the Du Midi and Lourcine, where this treatment is employed, and flock to the St. Louis, where they know they will not receive

it."—*Paris Correspondent to Journal of Cut. and Genito-Urinary Diseases.*

THE RELATION OF TEA-DRINKING TO DISORDERS OF THE NERVOUS SYSTEM.—In a paper having the above title (*Boston Med. and Surg. Jour.*) the author, Dr. W. N. Bullard, sums up with the following conclusions:

(1) Chronic tea-poisoning produces a condition of irritability or hyperexcitability of the nervous system, and does this both directly by the action of the tea upon the nervous system and indirectly by the production of gastric derangement.

(2) Tea taken frequently and in moderate doses for a considerable period of time tends therefore to place the nervous system in a condition in which it is more easily affected injuriously by slight external influences. It therefore favors the production of many forms of functional neuroses, and, if such neuroses already exist, aids in their continuance.

(3) There is no evidence that tea taken in the manner described causes any organic nervous lesion, but it is probable that if such nervous lesion should exist, tea thus taken might tend to cause an aggravation and continuance of certain symptoms.

(4) There is no evidence that chronic tea-poisoning produces unaided any serious functional neurosis in persons not in any way specially predisposed thereto. It does, however, in the manner above described act as an important factor in the production of neuralgia, hysteria and allied affections.

(5) When taken constantly in very large doses dyspeptic symptoms usually intervene before irreparable harm is done to the nervous system.

(6) In hemicrania and possibly some other functional neuroses there is probably a craving on the part of the nervous system for a slight stimulation, which is better afforded by tea than by any other equally accessible article, and for this reason patients with hemicrania are so frequently tea-drinkers.

AN IMPROVED CAUSTIC PASTE.—Dr. Jules Felix, of Brussels, having found existing caustics unsatisfactory from the great pain which is caused by their application, from the difficulty of limiting their action precisely to the part desired, from their deliquescence and from various other causes, has devised a form of caustic paste which he has been using for some time past with the best results. It does not cause severe pain or set up any general reaction; the eschar is hard and well defined, so as to be easily detached. It is also a powerful antiseptic and hæmostatic. It is not deliquescent, but keeps its consistence, which is that of putty, well, and so lends itself easily to manipulation. The hands should be well wetted when applying it. They are not in any danger of being acted on. The paste is allowed to remain for from six to twenty-four hours according to the amount of eschar which it is desired to form. The formula for the paste is as follows: Mix in a mortar the following substances in powder: Starch, 37 parts; wheat flour, 112 parts; bichloride of mercury, 1 part; dry chloride of zinc, 110 parts; iodol pure, 10 parts; crystallized carbolic acid, 10 parts. Then add gradually a sufficient quantity of distilled water to form a homogeneous paste without lumps of the consistence of putty. This paste will keep an indefinite length of time.—*Lancet*, August 6, 1887.

THE IRRIGATION SYSTEM OF DISPOSING OF SEWAGE.—The irrigation system of sewage disposal has been greatly extended in Germany. In Berlin it has given satisfaction, the sewage of 900,000 people being carried to irrigation fields, and the water which drains off being submitted to chemical examination for evidences of pollution, which were discovered but once during an entire year. The objection that this system of sewage treatment is not applicable in cold climates is invalid, as is shown by the results in Pullman, Ill., and in Dantzig, Germany. Birmingham, England, with a population of 500,000, has adopted the irrigation system, and the income realized during 1885 from the sale of stockand produce from the sewage farm, amounted to over $100.000.—*Medical News.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, SEPTEMBER 24, 1887.

Editorial.

RESUMPTION OF WORK IN MEDICAL SOCIETIES.—During the next few weeks the numerous medical societies in this and other cities will resume their usual Winter sessions. The resumption of this character of medical work is not an unwelcome event to the journalists. The pages of many of the weekly and monthly medical journals owe much of their value to professional readers to the published reports of the medicial society proceedings. From this source numerous original articles are obtained, whilst the discussions which are held in a good working medical society are oftentimes eminently worthy of preservation in print.

One fact is very striking in connection with the progress of medicine at the present day. We refer to the growth of medical organizations in every section of our county and to the widespread interest in the science of medicine which they have aroused among medical practitioners. It has not been many years back when only the large centres of population could afford the luxury of a local medical society and one or two of these organizations were sufficient to call forth all of the local professional talent in their respective communities. To-day the larger cities can boast of medical societies by the half-dozen or more, whilst many country villages are creditably represented by a medical organization. Another fact is also noteworthy. A few years back it was next to impossible to obtain a society report that was reported with sufficient care or accuracy to be worthy of record in print. To-day a number of the leading local societies employ stenographic reporters and issue annual volumes of printed transactions. Other societies furnish regular reports of their proceedings to the various journals and in this way secure a wide publication of their work. A society which fails to employ this latter method is not likely to secure a wide prominence in print. In the competition for place and position it seems necessary that the local medical society should employ the agency of the medical press. Those men who write well or who talk well upon medical subjects will not bury their efforts. A society that wishes to secure the influence and work of such men must offer some guarantee that a larger publicity is given to the proceedings of its meetings than the simple records of the recording secretary. We cannot ignore the influences which are at work on every hand. He who attempts to swim against the current is opposing his own progress. The earnest professional worker will and must employ every agency that will give character and influence to his work if he would keep pace with busy workers in other fields. He may employ one agency or another, but he will not be derelict in selecting one which will advance his claims and aspirations. Through the agency of the medical society a fair and efficient means is presented for the exercise of professional industry, talent, educational training and experience. If the agency is employed in the proper manner it becomes a most potent influence for self-instruction and for the dissemination of one's views and knowledge of a given subject. Most of that work which is best in science and practice is introduced to the professional world through the medium of which we speak. We may therefore, speak hopefully of the influences which medical organizations are everywhere exercising upon the medical mind and give encouragement to those schemes or methods which will enhance their value or effectiveness. The facts which

we wish to make plain are these. The value of a medical organization to its membership, first, and to the profession at large, secondly, depends altogether upon the way its work is performed by its individual members and the way this work is made known. Unless the work itself is creditable its dissemination had best be suppressed. But much that is good in discussion is often so marred by irrelevant statements and indifferent preparation that its value for publication is almost wholly destroyed. It is important that all work done in the medical society should be carefully done. Papers when offered should bear evidence of careful preparation, and even when not promulgating anything original should at least contain some fact of experience or matter of information that will have an instructive value. Cases when reported should be selected with reference to some unusual feature, either of pathology, clinical history or treatment, which will give interest to their relation. Pathological specimens should show some care in selection and preparation, and possess at least an instructive feature. In short, the subject matter brought forward should have either a scientific or practical value and should be presented in a way to enlist an interest and attention. Should a discussion follow this should likewise be direct, practical and instructive. Something can be imparted and something be learned if such careful methods, as we suggest, are employed in society work. Nothing contributes so much to the improvement of the professional mind as the relation of individual experience, the exchange of opinions and ideas, the frank and full discussion of unsettled and difficult questions. No one can doubt that the professional intercourse which is brought about by medical organizations has a most valuable influence upon professional interests. We should encourage every means which will elevate the standard of the profession, enlarge its information and knowledge, promote a more careful study of disease, a larger and more systematic observation of its phenomena, and a more correct appreciation of the aims and beneficence of true scientific work. All of these influences are fostered by a well organized medical society.

INDEX CATALOGUE, VOLUME VIII.—Volume VIII of the Index Catalogue of the Library of the Surgeon-General's Office is now in print and a copy has has been received at the office of the JOURNAL. This volume includes 13,405 author titles, representing 5,307 volumes and 13,205 pamphlets. It also includes 12,642 subject titles of separate books and pamphlets and 24,174 titles of articles in periodicals. The volume begins with the name *Legier* and closes with *Medicine* (*naval*). The subjects embraced under the latter word occupy no less than 288 pages of the present volume. The total number of titles in the Index-Catalogue as far as published presents the following array of figures. Author titles 86,976, volumes 44,559, pamphlets 72,902. Under the head of subjecttitles there are 83,155 booktitles and 278,231 journal titles. 4,335 titles of portraits have appeared in the work. It so happened that all of the titles of portraits appeared in Volume III.

As this work continues to appear under the management and direction of Dr. Billings the magnitude of his labors and efforts in building up the vast medical library in connection with the Office of the Surgeon-General of the U. S. Army becomes more apparent.

If Dr. Billings had have done nothing else for his profession the talent and energy expended in this work would alone entitle him to the earnest gratitude of every lover of medical science and literature.

Miscellany.

IMPETIGO CONTAGIOSA IN CHILDREN.—Dr. Zit, of Prague, (*Archiv für Kinderh.*, VIII. Band, 1887) considers that the overcrowding of dwellings exerts a great influence upon the origin of impetigo contagiosa. He is in doubt as to whether the the character of the soil exerts any influence, but quotes from Beach an account of an epidemic which prevailed in a street which had

been built on soil previously a morass. The contagion is most marked when the eruption occurs upon the scalp, and appears to spread among the children using the same comb. He thinks the care of the hair and scalp does not receive the proper attention on the part of the parents and hair-dressers, who should be instructed in this manner of spreading infectious diseases. Premature baldness he believes to be often communicated from person to person by the use of brushes, etc. Unless properly treated impetigo may last for months. In the author's hands 1 to 1,000 corrosive sublimate solution has given good results.—*Journal Cutaneous and Genito-Urinary Diseases.*

Tuberculosis of the Skin.—Professor Schwimmer (*Viertelj. f. und Syph.* Heft. I. 1887) does not accept as fully proven that lupus is a local tuberculosis of the skin, and believes that the clinical pictures of the two diseases are quite distinct.

1. Cutaneous tuberculosis is a rarity; lupus is relatively freqent. Tuberculosis rapidly breaks down and lupus nodules are wanting.

2. Tuberculosis is almost exclusively found in mucous membranes at first, and only subsequently extends to the skin. In lupus, the converse is the rule, rarely being found upon a mucous membrane alone.

3. Lupus of the skin rarely leads to general tuberculosis, while tubercle is the index of a constitutional disease.

4. In cutaneous tuberculosis bacilli are much more numerous than in lupus, as numerous, in fact, as the sputum of phthisis.

The lepra and syphilis bacillus closely resemble that of tubercle, and he questions whether the lupus and tubercle bacilli are identical.

Lupus has not yet been produced by inoculation from tuberculosis, although it is said that innoculation with lupus tissue has produced tuberculosis. If identical, they should be equally transmissible, the one from the other. In treatment, destructive agents which prove so useful in lupus, do not act so favorably on tuberculosis, which is more benefited by measures which diminish irritation. The pain of the latter disease he has found to be best relieved by papyotin in 5 per cent. solution, which has no effect on lupus.—*Journal Cutaneous and Genito-Urinary Diseases.*

Freckles.—The popular preparation known as Perry's Moth and Freckle Cure is said to have the following composition: Bichloride of mercury, 0.72 per cent.; sulphate of zinc, 0.85 per cent. In the sediment were also found small quantities of lead and bismuth.

It is said that several young ladies of Salamanca have had their faces disfigured, and one is in danger of losing an eye, from the use of a freckle remover and complexion *beautifier*. It was sold by a traveling fakir calling himself Dr. McGaw, who has since been arrested. The preparation is thought to be concentrated lye.

Powdered saltpetre, applied carefully to each freckle, previously moistened, is said to be efficacious when perfectly done and judiciously repeated.

The pigment of lentigo resides almost wholly in the epidermis, and although many acids, but preferably a one or two per cent. solution of corrosive sublimate, carefully applied, will remove the spots, they are apt to recur in the summer season.—*Journal Cutaneous and Genito-Urinary Diseases.*

Nitroglycerine in Nephritis and Uræmia.—Dr. S. A. Lentovsky, of the Cronstadt Marine Hospital, employed nitroglycerine (in tabloids containing each 1-100th of a grain of the drug) and hot water baths in four cases, three of which are given with minute details. In two of the patients the daily amount of urine rapidly increased, while albuminuria and dropsy disappeared and the patient's subjective feeling and general state strikingly improved. In a third case the improvement was but fleeting, the patient dying after a short stay at the hospital. The post-mortem examination showed that he had not suffered from nephritis, but from an extensive

amyloid degeneration of the kidneys and spleen. The remaining case illustrates the beneficial action of nitroglycerine on uræmic symptoms. The patient, a girl of 15, was brought in an almost unconscious state, with general convulsions, frequent vomiting (the ejected matter smelling of urine), extensive dropsy, stertorous frequent breathing, and small pulse. Nitroglycerine and hot baths having been at ence ordered, on the next day the girl was able to sit up in her bed, ate with appetite, and generally felt comparatively well.—*London Medical Record*, August 15, 1887.

Administration of Phosphorus.—Soltmann recommends an oily solution, 1:500. Gr. iij of phosphorus are dissolved in ℥iij ½ oil of almonds over a water bath. If the phosphorus has been previously dried thoroughly, and the process carefully conducted, no phosphorus is deposited. We may order:

℞. Phosphorus . . gr. ⅙
Cod liver oil. . ℥iij ½ ♏
S.—One teaspoonful daily.

Or the following formula may be used:

℞. Phosphorus. . . gr. ⅙
Oil bitter almonds. . 3 ijss
Distilled water. . 3 xx.
Gum arabic. . . 3 ijss
♏. Make an emulsion.

S.—One teaspoonful daily.—*Therapeutische Monatshefte*, May, 1887.—*Jour. American Medical Association.*

A Convenient Application for Insect Bites.—Bernbeck uses the following:

Flexible collodion	19 parts.
Salicylic acid	1 part.

Or,

Flexible collodion	1000 parts.
Bichloride of mercury	1 part.

—*Weiner Presse*, July 10, 1887.—*Med. News.*

The Administration of Opium.—There are few drugs more commonly prescribed than opium, and it is certain there is none more abused or more carelessly combined. Of its numerous official preparations it cannot be said that their individual actions are free from the disagreeable after effects which characterize that of the pure drug. The problem is to get all the good effects of the drug, and yet to obviate the resulting headache, sickness, and loss of appetite caused by arrestment of the secretions of the alimentary canal. This, of course, refers to medium doses. Belladonna or atropine have for long been given in combination with opium, but in these respects the result has been mostly a failure, the reason being that while the actions of these drugs on the central nervous system are to a certain extent antagonistic, their actions on the alimentary secretions are much the same. For some time Dr. A. G. Auld (*Lancet*, July 16, 1887) has given opium in combination with ether with good results, ether being one of the most powerful secretion stimulants we know. He generally prescribes equal quantities of tincture of opium and spirit of ether, and though not claiming for this a specific effect, thinks it a good and most useful mixture.—*Ther. Gazette.*

A Mixture for Flatulent Dyspepsia.—"Lyon médical," quoting from the "Revue de chirurgie et de thérapeutique," gives this formula:

Tincture of gentian, Tincture of star-anise, Tincture of nux vomica,	each 8 parts;
Chloroform	2 to 4 "

From eight to ten drops are to be taken before each meal, in a wineglassful of water.—*N. Y. Medical Journal.*

Treatment of a Stye.—M. Abadil recommends a three per cent. solution of boracic acid for styes. With a wetted piece of wadding some of this solution is to be dropped on the stye several times a day. It is said not only to effect a cure, but to prevent a return of the annoyance.—*Canada Medical Record.*

JACOBY (G. W.) ON THE TREATMENT OF NEURALGIA BY MEANS OF INTENSE COLD.—The author sets forth the advantages attending the use of chloride of methyl and liquid carbonic acid. His general impression is that we had in chloride of methyl a reliable analgesic which did not affect the general condition of the patient, and that it is invaluable in the treatment of neuralgia for the immediate relief of severe pain. It is used in the form of spray under high pressure. The objections to be overcome are the expense of the apparatus and the difficulties of getting the drug. From his experience in the use of condensed carbonic acid, his conclusions are that, in the absence of chloride of methyl, it is able to take the place of that remedy in the treatment of sciatica; that the pain is relieved very promptly by it, but that its curative effect is not so great as that attributed to the chloride of methyl by other observers.—*N. Y. Medical Journal*, July 30, 1887.

NEW PROCEDURE FOR THE EXTIRPATION OF ADENOID VEGETATIONS.—Löwenberg having abandoned his crushing forceps, which have been found apt to damage adjacent healthy tissue, has devised a new instrument for the removal these growths. It consists of an oblong handle, being curved so as to adapt itself to the vault of the pharynx. A curved metallic plate is attached to the anterior aspect of the ring-knife, the two being separated or approximated by a sliding mechanism. It is the opinion of the author that the growths need to be removed only sufficient to permit nasal breathing and restore the function of the Eustachian tubes. With this instrument it is impossible to do damage, and it may be used without the aid of the finger or rhinal mirror, after preliminary inspection and palpation.—*Lon. Med. Record*, July, 1887.

SAWYER (J.) ON THE TREATMENT OF GASTRALGIA.—Before you prescribe you ought to find out if there be any prominent pathological concomitants or causal antecedents of the disorder, and deal with them. Anæmia, sexual excess, overwork, work under wrong conditions, uterine discharges, masturbation, etc., must be appropriately met. But for the cure of the gastralgia something more is usually necessary. Of all the directly therapeutic results in medicine with which I am acquainted, one of the most can demonstrable is that which be produced by the suitable exhibition of arsenious acid in uncomplicated gastralgia. I give one twenty-fourth of a grain of arsenious acid, made into a pill with two grains of extract of gentian, thrice daily, between meals. The use of this remedy must be continued for a few weeks. In a case of moderate severity no other medicinal treatment is necessary. The gastralgic pains becomes less severe, and recovery is steadily and surely attained. In severe cases I use some form of counter-irritation to the epigastrium, and I usually employ a rubefacient liniment of ammonia. In the severest cases vesication by a fly-blister is of service, and the blistered surface should be kept raw for some days by means of a daily dressing of savin ointment. But you must not rely upon treatment by drugs alone. Every hygienic adjuvant which tends to raise the strength of the patient is of high value in the cure of gastralgia. I especially advise you to make sure the sufferer feeds well and fully. The diet should be generous.—*Lancet*, Aug. 13, 1887.

THE TREATMENT OF HEPATIC CONGESTION.—Jules Cyr is quoted by the *Revue de Thérapeutique*, of June 15, 1887, as using the following treatment:

1. Application over the liver of compresses of cold water, often renewed; two or three leeches about the anus.

2. At evening, three-fourths of a grain of calomel should be taken, followed the next morning by five drachms of Glauber's salts.

3. As beverage, milk and Vichy water, or seventy-grains of ammonium chloride in a quart of water.

4. A douche, while patient is reclining, of water at a pleasant temperature given over the hepatic region—*Medical News.*

Headache from Errors of Refraction.—In a paper read before the Liverpool Medical Association Mr. T. H. Bickerton says: When one sees, as I have, headache from the simplest to the more intense, headache intermittent or constant, in some cases associated with indigestion, biliousness and vomiting, in some with giddiness and faintness, and in others with languor, sleeplessness, and general debility; when one sees not only the headache but all its varied concomitants vanish by the means of accurately fitted glasses—then I say it is impossible to come to any other conclusion than that errors of the refractive media of the eye are answerable for a large number of our every-day headaches, a number quite unsuspected by the profession at large. And in saying this I would wish most particularly not to be misunderstood. I do not for one moment suppose that all headaches are due to ocular trouble—far from it; but I do believe that a very large minority are due to this cause. In one respect I labor under the disadvantage of not seeing general practice, and therefore have not the opportunity of seeing the many varied conditions of health which lead to headache irrespective of a definite cause. I therefore ask to be forgiven if I appear inclined to overrate the importance of the specialty at which I am engaged, and I have the satisfaction of knowing that there are many practitioners who have a vast experience of headache, and that they will be able to bear me out in my conclusions, or, on the other hand, to correct me.—*Lancet*, August 13, 1887.

Bone Peg in Operation for Pseudarthrosis.—At a recent meeting of the Paris Société de Chirurgue, a report of which appears in the *Deutsche Medizinal-Zeitung*, M. Richelot related the case of a hysterical girl, sixteen years old, with a congenital atrophy of the face, for which resection of a portion of the lower jaw was performed. The fragments were united with silver wire, but the patient was restless, and the union which took place was by fibrous tissue. Dr. Routier subsequently drilled a hole through the fragments, excised the callus, and pegged the two parts of the bone together with a portion of the tibia of a calf, which had been steeped for twenty-four hours in a solution of 1 part of corrosive sublimate in a mixture of 900 parts of distilled water and 100 of alcohol. Bony union followed, with only a slight asymmetry, and the patient could eat better than before. No disturbances of the dental nerves were observed.—*The New York Medical Journal*, August 27, 1887.

Diagnosis of Beginning Carcinoma of the Cervix.—Since experience has shown that beginning carcinoma of the cervix can be entirely cured by operation, it is important that family physicians send the patient to the specialist early. And in order to make at least a probable diagnosis without microscopic examination of an excised piece, C. H. Stratz says that from his observation and that of others the important signs of carcinoma are as follows:

1. The diseased place is sharply limited by sound tissue, and never goes over into it by degrees.

2. A difference in the level of the whole diseased portion can always be made out.

3. Carcinomatous portions have always a light yellow color.

4. The malignant deposit is usually shown as finely granular, whitish-yellow glistening elevations, at least in individual places.—*Centralbl. für Chirurgie*, No. 25, 1887.—*Jour. Amer. Med. Asso.*

The American Public Health Association will hold its fifteenth annual meeting at Memphis, Nov. 8, 9, 10, and 11, 1887. The following are the subjects specially selected for consideration at that time: "The Pollution of Water Supplies;" "The Disposal of Refuse Matter of Cities;" "The Disposal of Refuse Matter of Villages, Summer Resorts and Tenements;" and "Animal Diseases Dangerous to Man."

Dr. W. Atkinson (*Progress*) recommends enemata of tincture of assafœtida in seat worms.

Medical Items.

The distinguished English physician, Dr. Richard Quain, is dead.

The fourth annual meeting of the New State Medical Association was held at the Hotel Brunswick, in New York City, under the presidency of Dr. I. E. Taylor on September 17, 18 and 19th.

In addition to the honor of knighthood which was conferred by the Queen, it is said, that Dr. Morrell Mackenzie will receive $12,500 for professional services rendered to the Crown Prince.

The rejection of Professor Virchow, who was a candidate for the post of Rector of the Univefsity of Berlin, has produced no little excitement in that city. His defeat is attributed to political influences.

Mrs. D. B. Miltenberger, the wife of the late General Miltenberger and the venerable mother of Prof. G. W. Miltenberger, died at the residence of the latter, in this city, on September 21st, at the advanced age of 96 years.

The Free Lying-in Hospital of the University of Maryland is now open for the reception of patients at No. 622 West Lombard Street. Any poor patient, white or colored, in the last two weeks of her pregnancy will be admitted, free of charge, upon application to the Hospital.

According to the *Pravitelstvennyi Vestnik*, the Russian army has 2,808 surgeons, 232 veterinary surgeons, and 3,455 *feldshers* (medical assistants). The strength of the Russian army on a peace footing is said to be about 800,000, so that the allowance is about one surgeon to every 300 men.

Antifungine. — Borate of magnesia, to which the absurd name "antifungine" has been applied, is recommended in solution (15 per cent.) in the treatment of diphtheria. It is applied locally by the spray or with a soft brush, and is also to be taken internally in doses of from five to twenty minims.—*Brit. Med. Jour.*

Dr. George Granville Bantock, the distinguished ovariotomist and one of the surgeons to the Samaritan Hospital is spending a few days in this city as the guest of Dr. H. P. C. Wilson. Dr. Bantock discards the use of antiseptic agents in abdominal surgery. He uses water from the tap and employs absolute cleanliness. His last 79 ovariotomies have been performed without a single death.

Dr. Faust (Dresden) recommends in the *Deutsche Med. Wochenschrift* antifebrin in doses from 0.5 to 1 gramme for headache. He noticed upon himself that migraine which defied all other remedies disappeared entirely in from half an hour to an hour's time after one of the above doses; he has obtained the same results in many other cases.

One of the noticeable features of the recent Centennial Celebration in Philadelphia was an emergency ambulance service which did duty along the route of the parade. The service was modelled after the Geneva Red Cross Commission. Ambulances accompanied by physicians on horseback were placed at different stations and rendered immediate aid to the disabeled or injured. The service did excellent work and doubtless prevented much unnecessary suffering.

The American Gynæcological Society has elected the following officers for the ensuing year. President, Dr. Robert Battey, Rome Ga.; Vice-Presidents, Dr. A. Reeves Jackson, of Chicago; and Dr. J. R. Chadwick, of Boston; Secretary, Dr. J. Taber Johnson, of Washington; Treasurer, Dr. M. D. Mann, of Buffalo. The meeting next year will be held in Boston on the third Tuesday in September.

I think I am justified in saying that no other one influence operative in human society during the present century has done as much to develop and diffuse medical knowledge, to stimulate its practical and successful application, both in sanitary measures for preventing disease and in the direct alleviation of suffering at the bedside, and unifying and ennobling the profession itself, as has been accomplished by the aggregate medical society organizations of the world. *Dr. N. S. Davis' address before Med. Congress.*

Dr. Haussman prescribes subcutaneous injections of atropine as a last resort in cases of serious hemoptysis. He cites three cases in which this remedy produced excellent results. The first was that of a patient who had serious hemoptysis twelve times in six days; three milligrammes of sulphate of atropine were injected; there was no recurrence of hemoptysis. The same result was obtained in the second patient, in whose case the administration of turpentine preparations and injections of ergotin had produced no improvement. In the third case a patient suffering from repeated hemoptysis was cured by two subcutaneous injections of three milligrammes of sulphate of atropine.—*Brit. Med. Jour.*

"Take my advice, and when you get a prescription put up at a drug store never ask how much it is," said one gentleman to another the other day. "Why not?" he was asked. "Because the clerk will 'size you up,' as the boy say, guess how much money you have got and charge you your pile."—"What do you advise?"—"Just this. When the urbane compounder of medicines hands forth your prescription, just look wise and lay down a quarter. Now the chances are that the drugs in the preparation don't cost over a dime. He will look at the quarter, study a minute, and then make up his mind that he has been foolish enough to sell you the same dose for twenty-five cents at some past time, and he'll take it and not say a word. Lay down a dollar, however, and it will be just the same—no change. Try it and see."—*Boston Med. and Surg. Jour.*

Original Articles.

PRACTICAL NOTES UPON SURGICAL SUBJECTS.

BY RANDOLPH WINSLOW, A.M., M.D.,

Professor of Surgery in the Woman's Medical College of Baltimore; Lecturer on Clinical Surgery University of Maryland.

(*Continued from Sept* 3, 1887.)

THE ACUTE ULCERS.

The term acute as applied to ulceration has reference not only to the length of time which the ulcer has been in existence, but to the severity and urgency of the ulcerative process. The acute ulcer much more frequently depends upon constitutional causes than does the chronic, which latter is usually local in origin. An ulcer may be acute from the beginning or there may be an acute engrafted upon a chronic process. This form of ulceration generally indicates a broken down and vitiated constitution, and is especially apt to occur in those who are addicted to alcohol. Erysipelas is a disease in which acute ulceration is especially likely to occur, either in the form of a molecular disintegration or with sloughing. The same may result from syphilis, scurvy, anæmia and other constitutional dyscrasiæ. When the ulceration spreads rapidly by means of molecular disintegration it is known as phagadenic; when the extension is attened with death of considerable portions of the skin or connective tissue, the ulcerating surface is known as a sloughing ulcer. If the ulcer pursues an irregular, erratic course, extending as a narrow, elongated strip, perhaps traversing a long distance, it is spoken of as being serpiginous. An acute ulcer is usually preceded by acute inflammation or is coincident with such an inflammation; this inflammation is generally of the aplastic or asthenic variety, in which the tendency is to destruction of tissue, rather than to repair. The worst case of acute ulceration which it has been my lot to see, was dependent upon an attack of erysipelas; the affection having its origin as a small sore at one of the malleoli, extended rapidly until the limb had been half denuded of integument from the ankle to the thigh, and finally the patient died from exhaustion. One great characteristic of an acute ulcer is its irregularity in regard to size and shape. Whilst the sore may not attain large dimensions, it is much more likely to do so, than is the chronic ulcer; and, as mentioned above, it may half denude a limb, or it may quite encircle a limb, completely severing the continuity of the integument and rendering no treatment of avail, except amputation. In shape the acute ulcer is subject to great variations usually having a tendency to preserve an oval form, but often being irregular, serpiginous and sinuous. The edges are usually undermined, and are thin and often sloughing. The base of the sore is foul, frequently red, sometimes covered with shreds of necrotic tissue, and during the period of extension presenting no appearance of healthy granulations. The surrounding integument is generally red, or purplish from passive congestion, œdematous, hot and painful, presenting the evidence of acute inflammation. The degree of pain is variable, and whilst others much larger in area are not very sensitive. The acute ulcer is as a rule much more painful than the chronic, even when the two varities correspond in other respects. This variety of ulceration may spread with great rapidity, causing in a few days ravages which may be irreparable or which may take many months to repair. During the advancing stage of the ulceration, the discharge from the sore will be ichorous, thin, irritating, frequently sanious and mixed with debris of disintegrating tissues. If the sore is small there will probably only be a moderate constitutional reaction, slight fever, irritability, loss of appetite and loss of sleep; but if a considerable area is involved, especially if there is an erysipelatous condition, the constitutional symptoms will be marked and adynamic in character, the fever being high, pulse frequent and weak, tongue furred and perhaps dry and cracked, delirium, and the usual symptoms of a typhoid

condition. The acute ulcer as described above is rarely seen amongst the better classes, but as has been stated is especially frequent amongst those whose constitutions have been undermined by drink and vicious living. Amongst the worst forms of acute ulceration may be placed syphilitic and chancroidal infection of the genitals in cases of depraved and broken down individuals; in such, the local disease sometimes takes on phagedenic action, rapidly destroying not only the organs in which it has originated, but extending at times to great distances. I have attempted to describe, briefly, the chief characteristics of an extending ulceration, in which there is still destruction of tissue and little or no effect at repair. In the course of time, either on account of appropriate treatment, or because tissues are reached which resist the farther spread of the disease, the ulcerative action is arrested, and the sore remains in *statu quo*, or repair by means of granulations is attempted. In the one case, the sore becomes chronic, neither advancing nor decreasing, foul in appearance, and making no attempt to heal the breach; in the other, an effort at repair may be made, but the granulations become too exuberant, livid and rising so high above the edges of the skin, as to frustrate the formation of a cicatrix, or the granulations may be formed, but instead of going on to the formation of a cicatrix, they become pale, œdematous and unfit for reparative purposes; in the language of the laity the sore has become proud. As has been remarked the acute ulcer is usually attended with the usual signs of acute inflammation, and generally corresponds to the inflamed ulcers of the older authors; and if there is much pain present, the sore being sensitive, and resenting all manipulation, it was formerly known as the irritable ulcer.

TREATMENT.

The treatment of acute ulceration must be considered from several standpoints, and first of all from an etiological view. If the disease depends upon constitutional causes, it must receive the treatment appropriate to its cause; if syphilitic, the salts of mercury either alone or in combination with the iodides. If anæmia, or scurvy are the etiological factors in the production, the salts of iron and the vegetable acids are the proper constitutional remedies. In former times hospital gangrene or sloughing phagedena was very frequent, and as the name implies usually broke out in crowded and ill arranged hospitals, and was undoubtedly due to infection by means of microörganisms; but at present, with better sanitary regulations and the influence of antiseptic practice, but little of this dreadful disease is seen. If a rapidly progressive ulceration should occur in a crowded and unsanitary building, the very first element in the treatment would be isolation of the patient, more, however, to prevent a spread of the disease than as a therapeutical measure for the benefit of the patient. The ulcerating surfaces should be cauterized, with nitric acid, bromine, or some other potential caustic, or by means of the actual cautery, and the patient sustained in every way possible. This subject, however, is too extensive to be considered at any length in this paper.

In general the treatment appropriate to acute ulceration is that which is efficacious in acute inflammation. If the patient is plethoric and the inflammatory action is violent in character, the excessive action should be combatted by antiplogistic agents, as purgatives, and the use of arterial depressants, as antimonial wine, and pain and irritibility should be met with opium. Low diet should be enjoined, and rest of both the part and of the patient. Locally the affected part should have rest and sedation; this may be effected by scarification of the sore and of the surrounding tissues, but generally the application of cold as by irrigation from height, or the use of powerful astringents as the liq plumbi subacetat. will be all that is necessary to arrest the morbid action and set up reparative processes. If the ulcer is extending and sloughs are being formed there is nothing better than to keep the parts immersed in hot water until a heathy con-

dition is brought about. This treatment for sloughing wounds was brought to notice by the late Dr. F. H. Hamilton, of New York, and is essentially the same in principle as that made use of in Vienna in certain forms of skin disease, where the patient lies submerged for months in a general bath, with very good results. When healthy action is set up, any non-irritating dressing of the sore may be applied. If the ulcerated surface refuses to put on a healthy appearance, and granulations do not form properly, it should be well cauterised with nitrate of silver, or carbolic acid; or a touching with the thermo cautery will cause a stimulation of the surface, with the formation of proper granulations. If the surface is large, the application of adhesive strips and bandage may cause a rapid diminution in the size of the sore. If the granulations are too luxuriant, they must be repressed by a vigorous rub with the stick of lunar caustic, or pure carbolic acid, but in many cases it is preferable to shave off the granulations with a scalpel, or to reduce them with the scissors. Acute ulcers are more likely to be fungous, than the chronic, though it may occur in either condition, and require repression, no matter what the length of time may be. Prof. Gross prefers the acid nitrate of mercury solution diluted with 8 to 10 parts of water as a lotion for unhealthy ulcers. If the ulcer is preceded by or attended with an asthenic form of inflammation, depletory measures must not be employed, the patient must be sustained with nutritious food, tonics, and stimulants, and usually warm or hot water dressings, or immersion in the hot bath if convenient, until the morbid action is arrested. Opium appears to have considerable efficacy in these cases, as it tranquillises the patient, relieves pain and produces sleep, besides exerting apparently in some cases a directly curative effect. In most cases it will be necessary or at least advantageous to make use of antiseptics in the treatment of ulcers of all kinds, in order to prevent fetor, and limit the production of germs, whereby the surrounding tissues may be infected. This may be effected in various ways, as by the constant use of a carbolic acid solution, or what has answered admirably in my experience, the liberal application of powdered iodoform; but the odor of the latter is objectionable in private practice, and iodol may be used in its place. To sum up the treatment of acute ulceration, it may be stated that constitutional treatment will usually be required; depletory, if the existing inflammation is sthenic, restorative, if the condition is one of asthenia. Locally all cases should have rest, usually with the affected part in the elevated position; where the congestion is active, antiphlogistic applications, as cold irrigations, ice, or lead solutions may be employed, where the engorgement is passive, especially where sloughing is going on the long continued use of hot applications, with moisture. If the sore is rapidly spreading, cauterization with nitric acid or the red hot iron. After the arrest of the ulceration, the sore is to be treated on general principles, defective granulation to be stimulated by touching with nitrate of silver or carbolic acid; excessive granulations to be reduced by more decided cauterization. Defects of tissue, may be closed by judicious strapping with adhesive plaster, or by skin grafting, small bits of skin the size of a pin's head being laid upon the granulations, which form attachments and become centres for the formation of a cicatrix; or larger portions of skin may be slipped so as to cover the chasm. In all ulcers cleanliness is of the utmost importance; in fact the lack of it is one of the most frequent causes of the formation and persistence of these ailments.

(To be continued.)

The British Medical Journal states that the sum at the disposal of the Committee of the Moxon Memorial amounts to £605,16s. 10d., and that early in October a meeting will be held to determine the proportion in which it is to be assigned to the Royal College of Physicians and to Guy's Hospital, for their respective memorials.

PRACTICAL NOTES ON THE TREATMENT OF SKIN DISEASES.

Hypertrophies of the Epidermal and Papillary Layers.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene, in the College of Physicians and Surgeons.

(*Continued from issue of September* 10.)

ICHTHYOSIS.—*Fish-Skin Disease.*

Ichthyosis is rather rare in this country. The statistics of the American Dermatological Association show that one case of ichthyosis occurs in about 400 cases of skin disease of all kinds.

The name "fish-skin disease" well describes the appearance of the affection when well marked. The epidermic covering forms variously-sized diamond-shaped plates looking very much like the scales of a fish. This scaly arrangement is particularly pronounced upon the lower extremities, and especially upon the extensor surfaces. The flexures of the joints are usually free from the disease, or affected to a much slighter degree. These thickened epithelial plaques are generally much discolored, probably owing in part to dirt, but partly also to increase of pigment in the epidermis, as has been determined by microscopic examination.

In the milder degrees of ichthyosis the skin is dry, hard, and scaly, has a dirty and lifeless appearance, and is totally devoid of the normal softness and pliability except in the flexures of the joints. In many cases this stage is not exceeded, the large, thickened, cornified plates not being produced. These cases are often described as xeroderma or "dry skin."

In some extreme cases the plates are very much thickened and subdivided by deep clefts into small columnar areas. In others the epithelial hyperplasia seems to be limited to the sebaceous glands causing little spines of hardened epithelium to project from the gland ducts. This form has given rise to one of the popular names, "porcupine disease," for these cases. It is usually limited to patches of various size, rarely extending over the entire surface of the body. Ordinarily, the palms of the hands and soles of the feet are exempt from this disease, but exceptionally it may be limited to these surfaces. In these cases the diagnosis of tylosis is frequently made, but the hereditary nature of ichthyosis and its appearance early in life will enable the two conditions to be readily differentiated.

In very rare instances children are born with an ichthyotic skin. These children are generally born prematurely, and if living always die within a few days after birth.

The causes of ichthyosis are entirely unknown. It is a hereditary disease, the transmission being usually direct and oftenest in the male line. Instances of cross heredity are, however, not infrequent. An interesting fact connected with the etiology of ichthyosis is its endemic prevalence in certain limited areas of the earth. Hirsch (*Hist. Geogr. Pathologie*, III, 466), refers to reports of such endemics in Borneo, the Molluccas, the Marquesas and certain islands of the Samoan group, Guyaquil, the Peruvian and Senegambian coasts. The prevalence of the disease in these limited areas may be accounted for by its pronounced hereditary nature, being transmitted and perhaps intensified in character by the close in-and-in breeding in such localities. Hirsch suggests that the disease may be parasitic in origin in its endemic form.

Ichthyosis is not permanently curable by any means now known to the profession. The disease, however, never produces any unfavorable effects upon the general health. The local symptoms may always be relieved by appropriate palliative measures.

Of internal medicines arsenic and tar have been highly recommended by some authorities, but at the present day, few dermatologists use either in this disease. From arsenic, benefit might reasonably be expected, on account of its well-known influence over the nutrition of epidermal structures. It has, however,

failed to realize the anticipations of most of those who have given it a trial in this disease. Lombroso has used with success in one case *ustilago maidis* or corn smut, in doses of thirty grains per day continued with brief intermissions for four months.

The first indication in the treatment of ichthyosis is to remove the epithelial hypertrophy and the second to restrict its re-formation as much as possible.

As the disease is always milder in summer, the thought occurs that free perspiration promotes the removal of the thickened epidermis, and on trial this is found to be the case. The administration of jaborandi (3 i of the fluid extract daily), or of its alkaloid pilocarpine (one fifth grain hypodermatically) have been followed by rapid disappearance of the epidermal accumulation. Locally soft soap, spread upon muslin and applied like a plaster produces rapid maceration and removal of the upper layers of the skin, but is liable to be followed by eczema or other forms of dermatitis. The soap may also be used in the form of Hebra's *Spiritus Saponis Kalinus*, applying it with friction daily, or several times a day, and following its use with some soothing ointment, to restrain any eczematous tendency.

Alkaline baths, containing from two to eight ounces of carbonate of soda to the bath, are useful in the milder forms. Duhring highly recommends vapor baths. After the skin has been well softened by the bath, an ointment should be well rubbed in with considerable friction, constituting a sort of massage treatment. Ointments of various composition may be used.

Duhring recommends this:

℞. Adipis benzoati, 3 i.
Glycerinæ, M. xl.
Petrolati, ℥ ss. M.
S.—Apply after bathing.

Anderson advises a combination of bicarbonate of potash with oleate of bismuth as follows:

℞. Potassii bicarb., 3 iii.
Glycerinæ, ℥ i ss.
Ungt. bismuthi oleatis, ℥ iv.
M.

In my own practice, the simple glycerite of starch, so highly recommended by Lailler, has proven very effective in mild cases. The addition of 2 to 5 per cent. of salicylic acid ought to render this still more efficient.

The wearing of rubber gloves, when the disease is localized upon the hands, will keep the skin soft and pliable, especially if combined with one of the above mentioned ointments.

A permanent effect can only be obtained from any of these measures if their employment is persistent.

(To be continued.)

A FEW WORDS CONCERNING PAPOID.

BY WILLARD H. MORSE, M.D.,
WESTFIELD, N. J.

Oertel, though notably prejudiced in favor of carbolic acid inhalations, latterly advises the use of papoid in combination, basing this conclusion on the published announcement that in six hours he had effected the dissolution of a piece of diphtheritic membrane in a five per cent. solution. His associate, Rossbach, supplements Oertel's advice by advocating the application every five or ten minutes.

Schaeffer's "Treatment of Diphtheria," of which it is said, "it is so successful that he never loses a case," is described in the 52d vol. of the *Berliner Klinische Wochenschrift* as follows:

"A fresh one-fifth solution is applied with a soft brush every twenty minutes, commencing in the earliest stages of the disease. In many cases a one to one and one-half quickly freed the larynx of the exudate. The disappearance of the membrane is accompanied by reduction of the fever, and relief of the embarrassment of respiration." Schaeffer's is the treatment of the Berlin Children's Hospitals.

Bartholow, it has been observed,

makes no mention whatever in his *Materia Medica* of the solvent power of pepsine. Says a distinguished American therapeutist: "In characterizing papoid as a notable remedy among the numerous therapeutical agents, it is but necessary to refer to the one fact that it maintains by its action a certain parallelism between diphtheria and dyspepsia in the item of treatment. (1.) It is antiseptic, and an antiseptic is needed to destroy the diphtheria germ and to prevent the fermentation of the contents of the stomach. (2.) It digests the fibrin of the food and that of the membrane. (3.) It is anodyne in both maladies. (4.) It stimulates to healthy activity the peptic and the laryngeal muciparous glands."

Writes Aroval: "In comparing papoid with pepsine, I deduce that fibrin, —insoluble in water, ether, or alcohol—is equally unaffected by animal pepsine, but in presence of the vegetable pepsine, undergoes dissolution."

E. L. Baker, U. S. Consul at Buenos Ayres, whose long residence in the Argentine Republic has qualified him to write of the fruits of that country, says in a recent letter, "the papa tree (*carica papaia*) is called in this country the 'mamon.' It grows in almost all the Northern provinces. The fruit is fleshy and pulpy, adhering to the skin, and is very palatable, whether eaten raw or cooked. No care is taken for the cultivation of the tree." A. E. Morlan, of Berlize, describes the fruit as growing in Honduras, and adds that it is "too delicate to ship." The fruit is however, occasionally brought to New York, and more frequently to New Orleans.

Dr. Austin Flint says in his *Practice*, "experience does not seem to offer much testimony in favor of pepsin in dyspepsia." Taxed for his reason for such a statement, he said, "that it supplies a constituent element of the gastric juice is true; but as it does not stimulate and heal the peptic glands, its use is a therapeutical proceeding as silly as applying cocaine to a carious tooth for anodyne effect." In the same line of reasoning the late Dr. S. O. Vanderpoel may be quoted as saying, "in the face of the fact that he is a fool who treats a symptom, we relieve dyspepsia with pepsin, taking no care to soothe the offended gastric glands. "Balancing of this reasoning, it may be urged that papoid not only peptonizes the food, but it heals the diseased glands, and removes the mucus clothing the gastric mucous membrane."

Dr. Achilles Rose, of New York, in a paper published in 1885, brought forward the idea that dyspepsia is eminently a septic disease, and in nominating remedies has no mention of pepsin, which is without antiseptic qualities. If this theory has foundation, as undoubtedly it has, it is but necessary to call attention to the pronounced aseptic qualities of papoid to make another point in its favor as substitutive. Herren says, "papoid has an antiseptic action," and other observers substantiate this.

Dr. DeLaskie Miller, of Chicago, says that one of the pronounced requirements of diphtheria is the removal of the pseudo membrane, and though advocating the use of aqueous vapor for this purpose, finds faith in papoid "when ordinary remedies fail." He favors the spray, and would "continue the use of the atomizer as long as the false membrane persists."

Dr. T. B. Greenly, of West Point, Ky., solves the exudate by using a curved whalebone probang, armed at the curved end with a sponge which is dipped in a solution for procuring the dissolving of the membrane. He regards the use of a solution by gargling as well worth while.

Dr. J. M. DaCosta, of Philadelphia, says: "In the local treatment strong caustics have been abandoned. The remedy that has done best in solution of the membrane is pepsin in the form of spray." The Professor emphasizes the direction that it "must be a saturated solution of pure pepsin." With quality so various, it comes deduced that there is place for the substitute.

Dr. Eustace Smith in his service in the London Children's Hospitals, says of papoid in gastric catarrh: "I have found it of the very greatest value, and regard it as really a wonderful medicine."

At a discussion of the value of the

remedy in dyphtheria in the Berlin Medical Society, Drs. Croner, Flatow, Fraentzel and Leyden, related successful experiences, and the resolutons entered were as follows:

"1. There is no other remedy that can effect the removal of the pseudo-membrane in so short a time.

2. There is no other treatment under which recovery is so rapid."

Kohts and Asch report, "diphtheritic membranes in the throat and nose, are destroyed by a 5 per cent. solution applied every 15 or 20 minutes with a soft brush. This is effected in two or three hours." Kohts' eminence as a laryngologist has gained from the fact that in the recent treatment of several hundred cases, he has used no other remedy.

Dr. J. E. Winters, of New York, says of the digestive ferment treatment, "it should be freely used in every case where there is much depression." He however, does not deem the effect of local treatment as curative.

Niemèyer describes the membrane as "composed of fibro-albuminous material."

M. Vulpian "is supremely disgusted with the use of pepsin in the treatment of diphtheritis, as it is of such variable strength as to frequently prove absolutely useless," and was probably the first to point out the destruction of pancreatin by the gastric juice. Yet the *Gazette Medicale* quotes "M. Vulpian, the able exponent of the value" of this method of treatment. It is not other than apparently obvious that the distinguished academician has his theory tied to an ideal pepsin of vegetable origin. Remark excited by the flat refusal of this observer to acquiesce in the deductions of Bricheteau in favor of the solvent power of lactic acid, will be incident to his latest profession of opinion.

An observation communicated to the Academy of Sciences by M. Marcano, contains the suggestion that papoid "might be applied upon a large scale, so as to allow of the export of meat from South America in a form more nutritious and economical than the extracts."

Neftel's "indications for the treatment of dyspepsia," are (1.) The arrest of fermentation. (2.) Excitation of the secretion of healthy gastric juice, and (3.) Improvement of the digestive properties of the gastric juice. Pepsin fulfils but one of these indications, and papoid meets them all. The better known "indications" of Dr. T. Lauder Brunton, published in 1877, are not satisfied by pepsin or pancreatin.

Dr. A. F. Green, of Cleveland, regards the diphtheritic patches as abounding in fungi, and cites the antiseptic action of papoid as the reason for its sucessful application in his practice with diphtheria. His success has impressed other favorable reception of the remedy in the West.

Society Reports.

TRANSACTIONS OF THE CHICAGO GYNÆCOLOGICAL SOCIETY.

REGULAR MEETING HELD JULY 15TH, 1887.

The President, CHARLES WARRINGTON EARLE, M.D., in the chair.

The Secretary read the following inaugural in thesis, by Junius C. Hoag, M.D., Chicago, entitled,

ON THE IMPORTANCE OF ABDOMINAL PALPATION IN OBSTETRICAL DIAGNOSIS

It would be no easy matter to improve on the descriptions of the methods employed in diagnosing fetal positions and presentations as set forth in recent systematic works on the subject of obstetrics, particularly those emanating from German and French sources. It may, however, be useful to review these methods, which are latterly becoming so highly appreciated, and then draw attention to some special points of their applicability, while emphasizing those others which are clearly of the greatest possible importance.

First in point of discovery, but second as regards the date of its practical employment, comes the method of abdominal palpation which was applied in 1601, and popularized by Tarnier, who began its use in 1865.

In practising abdominal palpation, the surface of the abdomen should be fully exposed from the symphysis to the ensiform cartilage. Force is quite unnecessary in the examination; on the contrary, gentleness should always be observed, for an undue amount of pressure only results in exciting uterine contractions, which serve to interrupt the examination for the time being. Beginning with an ocular examination, attention should be paid to the size, form and configuration of the belly, to the condition of the abdominal walls, and to the appearance of the navel. It is well, in all cases, to first acquaint one's self with the position of the fundus uteri, remembering that it reaches the level of the umbilicus at about the end of the sixth lunar month. Then let the distance from the umbilicus to the ensiform cartilage be divided into three equal parts, and we have only to remember that the fundus approximately reaches the successive levels thus indicated at intervals of a lunar month each, until at the end of the ninth month, it has reached the neighborhood of the ensiform cartilage, after which it sinks until it reaches the level attained during the eighth month.

If, now, the physician extends his examination, employing for this purpose not merely the finger tips, but the entire palmar surface of the fingers, he may reach very exact results as regards the position, form, and consistence of the uterus, as well as the position and presentation of the fetus. When no large fetal parts are found, the uterus is remarkable for its softness and lack of elasticity, fluctuation being discoverable only in rare cases.

Proceeding with the examination, the head may be recognized as a hard, round mass, separated more or less perceptibly from the trunk by a furrow which corresponds to the neck. The breech forms a similar mass, but it is less hard, less round, less distinct; it is larger than the head, and is usually accompanied by smaller, less prominent but extremely mobile parts, which are the feet. The latter partly float in the liquor amnii, and may be displaced by one's hand with the utmost facility; but they do not return to their place with the quick rebound which in the cases of the head and breech gives the sensation of ballottement.

When the abdominal walls are thin, the pointed heel or sharp malleolus can sometimes be felt; indeed, the entire foot can often be fairly grasped in the hand. The breech being more firmly united to the trunk than the head, and being softer and less circumscribed in its outlines, is less mobile than the latter and does not give so plain a sensation of ballottement. Between the head and the breech, a large indistinctly outlined surface can be felt lying further to one side of the uterus than the other and offering a very considerable and very uniform degree of resistance to pressure; this is the back of the fetus. If any difficulty be experienced in palpating the back, a more definite feeling may be obtained by pressing down upon the large part at the fundus, thus increasing the dorsal convexity and rendering it more prominent. It is proper, in the next place, to ascertain the direction of the fetal axis. For this purpose, the examiner takes his place at the bed-side and lays his hands on the patient's abdomen at each side of the rectus abdominis, in such a manner that the finger tips are directed toward the symphysis and the wrists toward the umbilicus. Then a short quick movement is made by flexing the fingers, and it can readily be discovered whether or no there is a large movable part presenting at the pelvic brim. If such be the case, one obtains a feeling of ballottement. If the part, however, is fixed in this position, moderately deep pressure will enable one to discover its presence, and if the head presents, its shape can be still better appreciated by grasping it from below with the right hand alone, while the examiner faces the patient. In order to ascertain the position of the other fetal part, the examiner facing the patient places his open hands on her belly with the fingers directed toward the sternum, and seeks to obtain ballottement at the fundus uteri.

If the axis of the fetus has been found to correspond to that of the uterus, the

THE BEST ANTISEPTIC.

FOR BOTH INTERNAL AND EXTERNAL USE.

LISTERINE.

Formula.—*Listerine is the essential antiseptic constituent of Thyme, Eucalyptus Baptisia, Gaultheria and Mentha Arvensis, in combination. Each fluid drachm also contains two grains of refined and purified Benzo-Boracic Acid.*

Dose.—*Internally: One teaspoonful three or more times a day (as indicated), either full strength, or diluted, as necessary for varied conditions.*

LISTERINE is a well-proven antiseptic agent—an antizymotic—especially adapted to internal use, and to make and maintain surgical cleanliness—asepsis—in the treatment of all parts of the human body, whether by spray, irrigation, atomization, or simple local application, and therefore characterized by its particular adaptability to the field of

PREVENTIVE MEDICINE—INDIVIDUAL PROPHYLAXIS.

Physicians interested in LISTERINE will please send us their address, and receive by return mail our new and complete pamphlet of 36 quarto pages, embodying:

A TABULATED EXHIBIT of the action of LISTERINE upon inert Laboratory Compounds:

FULL AND EXHAUSTIVE REPORTS and Clinical observations from all sources, confirming the utility of LISTERINE as a General Antiseptic for both internal and external use; and particularly.

MICROSCOPIC OBSERVATIONS, showing the comparative value and availability of various antiseptics in the treatment of diseases of the Oral Cavity, by W. D. MILLER, A. B., PH., D., D. D. S., Prof. of Operative and Clinical Dentistry University of Berlin from whose deductions LISTERINE appears to be the most acceptable prophylactic for the care and preservation of the teeth.

DISEASES OF THE URIC ACID DIATHESIS.

LAMBERT'S

LITHIATED HYDRANGEA.

KIDNEY ALTERATIVE—ANTI-LITHIC.

FORMULA.—Each fluid drachm of "Lithiated Hydrangea" represents thirty grains of FRESH HYDRANGEA and three grain of CHEMICALLY PURE Benzo-Salicylate of Lithia. Prepared by our improved process of osmosis it is INVARIABLY of DEFINITE and UNIFOM therapeutic strength, and hence can be depended upon in clinical practice.

DOSE.—One or two teaspoonfuls four times a day (preferably between meals).

Urinary Calculus, Gout, Rheumatism, Bright's Disease, Diabetes, Cystitis, Hæmaturia Albuminuria, and Vesical Irritations generally.

WE have had prepared for the convenience of Physicians **Dietetic Notes,** *suggesting the articles of food to be allowed or prohibited in several of these diseases.*

These Dietetic Notes have been bound in the form of small perforated slips for Physicians to distribute to their patients Mailed gratis upon request, together with our latest compilation of case reports and clinical observations, bearing upon the treatment of this class of Diseases.

LAMBERT PHARMACAL COMPANY,

116 OLIVE STREET, SAINT LOUIS.

RHEUMATISM.

DIETETIC NOTE.—A fruit and vegetable diet is most favorable for patients with chronic rheumatic troubles.

Allowed.—Beef and mutton in moderation, with horse-radish as a relish; fish and eggs, green vegetables and fruit, especially lemons. The skimmed milk diet has been advocated by some authors.

Avoid.—Starchy and saccharine food; all malt liquors, wines and coffee.

COLDEN'S LIQUID BEEF TONIC.

ORIGINAL LABEL:
"Colden's Liebig's Liquid Extract of Beef and Tonic Invigorater."

An Invaluable Aid in the Treatment of all Cases of Debility.

☞ ESTABLISHED 15 YEARS. ☞ ENDORSED BY SCORES OF PHYSICIANS. ☞ BEWARE OF IMITATIONS.

☞ ESSENTIALLY DIFFERENT FROM ALL OTHER BEEF TONICS.

COLDEN'S LIQUID BEEF TONIC consists of the Extract of Beef (by Baron Liebig's process), spirit rendered non-injurious to the most delicate stomach by extraction of Fusel Oil, Soluble Citrate of Iron, Cinchona, Gentian, and simple aromatics. An official analysis of this preparation by the eminent chemist, ARTHUR HILL HASSALL, M.D., F.R.S., and an endorsement of by Sir ERASMUS WILSON, F.R.S., is printed on the label of each bottle.

In the treatment of all cases of Debility, Convalescence from severe illness, Anæmia, Malarial Fever, Chlorosis, Incipient Consumption, Lack of Nerve Tone, and of the Alcohol and Opium Habits, and all maladies requiring a Tonic Nutrient, it is superior to all other preparations.

It acts directly on the sentient gastric nerves, stimulating the follicles to secretion, and gives to weakened individuals that first prerequisite to improvement, an appetite.—By the urgent request of several eminent members of the medical profession, I have added to each wineglassful of this preparation two grains of SOLUBLE CITRATE OF IRON, and which is designated on the label WITH IRON, "No. 1;" while the same preparation, WITHOUT IRON, is designated on the label as "No. 2."

☞ *I will, upon application, send a sample bottle of* COLDEN'S LIQUID BEEF TONIC *to any physician in regular standing. Please ask your Dispensing Druggist (if he has not already a supply) to order it. In prescribing this preparation physicians should be particular to mention* "COLDEN'S," *viz.*, "EXT. CARNIS FL. COMP. (COLDEN)." *It is put up in pint bottles, and* CAN BE HAD OF WHOLESALE AND RETAIL DRUGGISTS GENERALLY THROUGHOUT THE UNITED STATES.

C. N. CRITTENTON, Sole Agent, 115 Fulton Street, New York.

GLENN'S SULPHUR SOAP.

All physicians know the great value of the local use of Sulphur in the TREATMENT OF DISEASES OF THE SKIN. GLENN'S SULPHUR SOAP is the ORIGINAL and BEST combination of its kind, and the one now generally used. For sale by all Druggists at 25 cents a cake, or three cakes for 60 cents. Beware of counterfeits.

CONSTANTINE'S PINE TAR SOAP.

BY FAR THE BEST TAR SOAP MADE. Has been on trial among physicians for very many years as a toilet soap and healing agent, and its superior virtues have been unanimously conceded in ALL CASES WHERE THE USE OF TAR IS INDICATED.

Unsolicited expressions of its excellence have been received from the Medical Faculty generally. None genuine unless stamped "A. A. Constantine's Persian Healing Pine Tar Soap." For sale by all Druggists.

Wholesale Depot, C. N. CRITTENTON, 115 Fulton Street, New York.

Please mention this Journal. ☞ Samples of above Soaps SENT FREE on application to any physician enclosing card.

SCOTT'S EMULSION

OF PURE COD LIVER OIL WITH HYPOPHOSPHITES OF LIME AND SODA.

THE STANDARD EMULSION OF COD LIVER OIL.

The ONLY Preparation of its class that will not SEPARATE nor SPOIL in any climate.

IT IS MADE FROM THE PUREST NORWEGIAN COD LIVER OIL, COMBINED WITH CHEMICALLY PURE HYPOPHOSPHITES AND GLYCERINE.

Acknowledged by leading Physicians in the U. S. and many other Countries to be the most ELEGANT most PALATABLE and EASILY DIGESTED preparation in the World, and can be tolerated longer by children and persons with delicate stomachs than any other.

WE ASK A CAREFUL COMPARATIVE TEST WITH ANY OR ALL SIMILAR PREPARATIONS.

FORMULA: 50 per cent. of Pure Cod Liver Oil, 6 grs. of the Hypophosphites of Lime, and 3 grs. of the Hypophosphite of Soda to a fluid ounce. Emulsified with mucilage and Glycerine.

S. & B's BUCKTHORN CORDIAL, RHAMNUS FRANGULA.

Is giving universal satisfaction to the profession, for its mild but certain and efficient cathartic action. It seems to be *almost* a *specific* for *habitual constipation*, and we are constantly in receipt of the most flattering reports regarding it. The care we use in its preparation—having the bark always the proper age, and properly exhausted—makes it always reliable in its action. Be sure and specify S. & B. Buckthorn Cordial.

To those who have for any reason never yet tried these preparations, we will be pleased to send samples free by express.

SCOTT & BOWNE, Mfg. Chemists, 132 & 134 S. 5th Ave., N. Y.

next question to be decided is whether the case is one of cephalic or breech presentation. These may be distinguished from each other by the rules already given. It has also been observed that in breech or transverse presentations the head may often be distinguished from the breech by reason of a parchment-like crackling, which, under favorable circumstances, may be elicited by firm pressure made with the hand. In some cases, especially when the fetus is small, the breech may be so diminutive and pointed as to be mistaken for one of the smaller parts; in cases of doubt, however, it is to be remembered that a breech gives the sensation of ballottement better than the small parts.

DIAGNOSIS OF POSITION.

Right and left positions of the fetus may be made out in several ways: First, by discovering the position of the back of the fetus. Secondly, by studying the relation of the small parts to the nearest-lying large part, remembering that the small parts correspond in position to the abdominal surface of the fetus. In making such an examination, it must be distinctly borne in mind that we are concerned with the mutual relations of the fetal parts and the uterus, not necessarily of the fetal parts and the abdomen. Thus, in cases of marked obliquity of the uterus, it may happen that one feels a large part decidedly at the right side of the abdomen, so that one might be inclined to think that the back of the fetus was in relation with the right side of the pelvis; but the correction is easily made by observing that the small parts are not to be found to the left of the fetus but to the right, and hence the back looks toward the left side of the pelvis. In cases in which the back lies directly forward it may be quite difficult to find the small parts; but in such cases, if the head is not already fixed in the pelvis, it may be possible to push the back to the right or left, thus rendering the small parts more accessible to exploratory efforts. In this connection, a possible source of error may be mentioned, in that small fibroids, especially of the subserous and interstitial varieties, as well as carcinomata of the peritoneum and aggregated cystomata of the ovaries, may be mistaken for the small parts.

Thirdly, in examining at the pelvic brim it will often be found that, in consequence of the usual flexion in cases of head presentation, one hand encounters more resistence than the other and, accordingly, will sink less deep in the abdominal walls. The side on which there is more resistance corresponds to the occiput; the other to the forehead.

Fourthly when the anterior shoulder can be palpated, it often affords reliable means of diagnosis, for it always occupies the same lateral half of the pelvis as does the occiput, and when the head has engaged it forms a prominence above the superior strait lying on the left side in the first position, on the right side in the second position.

DIAGNOSIS OF TRANSVERSE PRESENTATIONS.

Transverse presentations are recognizable by the presence on both sides of the uterus of a large part distinguished by ballottement, while the fundus is empty and one is able to indent the abdominal walls deeply over the symphysis. The presence of small parts in close proximity to the abdominal wall indicates that the back of the fetus is toward the sacrum.

DIAGNOSIS OF TWIN PREGNANCY.

Here the method of palpation may indeed afford valuable evidence, but it is itself by no means a satisfactory method of examination. But for that matter, even when assisted by the results of the additional methods of auscultation and internal examination, the most skilful obstetrician is often at fault in the diagnosis. A number of occasional characteristics of twin pregnancy may be mentioned, though they are for the most part quite indecisive. These are a very large and broad belly, a pronounced longitudinal furrow in the uterus, a feeling of fetal movements on both sides, edema of the legs, high position of the

inferior uterine segment, and absence of a presenting part. Of these characteristics importance attaches, in the first place, to the unusual size of the uterus; at least such a condition should always lead to additional circumspection. The longitudinal furrow is lacking, as a rule, and is sometimes very marked at the fundus in cases of simple pregnancy, indicating the remains of the fetal origin of the uterus from two halves. The other signs mentioned are still more doubtful. In palpating one may find three large parts, which is impossible in the case of a single normally developed fetus. Or, again, two distinct fetal hands may be made out, or two large parts may possibly be discovered, separated, however, by such a distance as to render it impossible that they should belong to the same fetus.

DIAGNOSIS OF HYDRAMNION.

The diagnosis of marked hydramnion toward the end of pregnancy is generally not very difficult. The belly is extremely distended, while the uterus is tense and elastic, giving plain evidence of fluctuation. The small parts can scarcely be recognized by palpation, but ballottement of one or two large parts can be practised with surprising ease; the latter also change their position frequently. Even if the fetal sounds cannot be heard, as in the case of a dead fetus, or if the fetal parts cannot readily be distinguished, a diagnosis of pregnancy can be made because a similar collection of fluid does not occur in the uterus in any other condition. If it be attempted to differentiate between hydramnion and twin pregnancy, it should be remembered that both conditions may be associated together.

CONTRACTION RING.

In certain cases, as when the descent of the fetus is prevented by pelvic contraction, shoulder presentation, hydrocephalus, etc., it is sometimes possible to detect, by palpation, the position of the contracting ring, which varies in level according to the degree of tension of the inferior uterine segment. In some cases, it may even reach a point midway between the symphysis and the umbilicus, or higher still. Accordingly, when it is found at an unusually high level, it may serve to awaken in one's mind the possibility of a threatened uterine rupture.

In this place, although somewhat foreign to the subject, mention may be made of the round ligament which may often be detected during abdominal palpation, when it is felt as a hard cord, which may be made to roll from side to side between the finger of the examiner and the firm surface of the uterus.

ABDOMINAL AUSCULTATION.

Auscultation, as a method of revealing the presence in utero of the fetus, was first brought forward in the early part of the present century. The scope of its application was enlarged by Depaul, in 1839, since which time its general utility has been recognized by all.

In the employment of this mode of examination, one is enabled to distinguish on the part of the mother the aortic, uterine, and intestinal sounds; and on the part of the fetus, the heart and funicular sounds. The uterine sounds correspond in frequency to the maternal pulse, the fetal heart-sounds to those of the funis. For precise information with regard to these sounds the application of the stethoscope is useful, but in the great majority of cases it is by no means indispensable, as the writer is able to affirm from a pretty extensive experience.

The fetal heart-sounds may usually be heard after the twentieth week, sometimes earlier. Schroeder asserts that, in the case of a healthy woman and a living child, they may always be made out; the statement, however, seems a little too absolute. But it is by no means too much to assert that, with a moderate amount of practice, one is enabled to hear them in almost every case, and that, too, without difficulty. The sounds vary in frequency from 120 to

160 beats per minute. The beats increase in frequency with the fetal movements. They are temporarily retarded by uterine contractions, which have even been known to destroy the life of the fetus. There is no definite relation subsisting between the frequency of the maternal and fetal heart-beats, but it has been shown that an abnormally high temperature on the part of mother is accompanied by increase in the frequency of the fetal heart-beats, and that when the temperature rises above 104° F., death of the fetus generally ensues. The frequency of the beats is also proportionate to the length of the fetus. The intensity of the sounds varies with the development of the fetus, the thickness of the abdominal walls, the quantity of the amniotic fluid, and the position of the fetus.

Recognizing in the detection of the fetal heart-sounds an absolute sign of pregnancy, care must be exercised to distinguish them from the maternal and aortic sounds. The uterine sounds are not very reliable in establishing a diagnosis of pregnancy, because they may also be heard in cases of inflammation of the uterus, uterine fibroids, and ovarian tumors.

As a method of diagnosing fetal positions and presentations, auscultation, while of great value, should always be associated with abdominal palpation. As a rule the heart-sounds are most distinctly heard below a transverse line dividing the uterus in two equal parts in cephalic presentations, and above such a line in breech cases. With the back to the left, the maximum of heart-sounds is heard in the lower part of the belly to the left, at some distance from the linea alba. With the back to the right it is generally heard on the right side close to the linea alba, less frequently far to the outer side, but occasionally the contrary, a little to the left of the linea alba. It should be remembered that when the uterus occupies a markedly oblique position, the linea alba does not furnish a reliable land-mark, but that the axis of the uterus should be taken as the point of departure.

DIAGNOSIS OF FACE PRESENTATION.

Auscultation offers valuable assistance in distinguishing face presentations from those of the head. In face presentations, the thorax lies so far over to that side of the uterus which does not correspond to the back, that one hears the heart-sounds in the locality designated. With the back to the left, the breech is felt at the left side, while above and to the right of it the small parts are distinguished, and the heart-sounds are heard somewhat to the right of the median line because the extended head has pushed the back away from the uterine wall, and the heart-sounds are transmitted to the ear, not through the back of the fetus, but directly from the cardiac region.

AUSCULTATION IN TWIN PREGNANCY.

In these cases auscultation generally enables one to hear two distinct sets of heart-sounds. That the sounds do not emanate from the same heart may be determined when they are plainly audible at several points in the belly, while at the intervening points they are only barely audible or disappear altogether; or when the sounds heard at the same time by two observers exhibit a different frequency of beat. One of the sets of sounds may generally be plainly heard, while the other is made out with difficulty, and is limited to a single small area. In the combined methods of palpation and auscultation, if one feel the head, for example, in the first cephalic position, and if small parts be found at the left, while on the right heart-sounds are distinctly audible, then one may decide that the head in the vagina does not belong to the fetus which has been discovered by external palpation.

In estimating the comparative value of the internal and external methods of examination, Schroeder says that in cases in which the diagnosis is rather difficult, the less practised observer will make fewer mistakes from an external examination. May we not, however, go still further and affirm that the external method gives more reliable and more

satisfactory results even in the hands of the expert obstetrician?

The importance of an early and exact diagnosis cannot be over-estimated, and yet it frequently happens that we are unable to secure either of these desiderata by means of the internal examination as, for example, when the os is so directed as to be almost inaccessible to the exploring finger, or when the cervical canal is not sufficiently dilated to admit the finger, or when the membranes are so tense that the presenting part cannot be examined without seriously endangering the integrity of the sac. Even when the conditions for a satisfactory internal examination are all present, one is limited, so far as concerns the fetus, to an examination of the presenting part, and obtains little or no information with regard to the other parts.

Further, if, as seems to be true, puerperal infection can be directly traced to contact of the physician's hand with the internal generative organs of the patient in a very large proportion of cases, may we not hope to limit its frequency, not only by strict antiseptic precautions, but also by substituting to a certain extent the external for the internal method of examination? All obstetrical writers who insist on strict antisepsis in the conduct of labor admit the possibility of conveying septic agents to the patients with each introduction of the finger in the internal examination. May it not, therefore, be both possible and practicable to so familiarize one's self with the external methods of examination as to render the frequent introduction of the finger unnecessary and at the same time promote the patient's welfare by obtaining in every case exact information with regard to the position of each accessible part?

In conclusion, the subject may be summarized as follows:

1st. The external methods of examnition recommend themselves in that they are simple, easily applied, and capable of furnishing full information with regard to the position of the various fetal parts and the vital condition of the child, thus preparing the obstetrician for timely and skilful interference, when obstetrical operations are called for in the interest of child or mother.

2d. By limiting the necessity of frequently repeated internal examinations they serve to enhance the safety of the mother.

DISCUSSION.

Dr. F. E. Waxham.—External palpation has always been rather unsatisfactory to me. I presume it is simply because I have not had the long continued practice that is necessary to make one skilful. While ordinarily it is possible for me to detect an oblique position of the child by external manipulation, yet I am free to confess that I have never been able to make a positive diagnosis as to the position of the head and breech. This is well illustrated by a case I had not long ago. By internal and external examination it was very evident that I had a cross presentation, and yet it was impossible for me to say positively where the head and where the breech was situated. I called upon Dr. Jaggard, who has had a great deal of experience in this matter, and he was able to state definitely the position of the breech, and the course of the labor justified the diagnosis.

Dr. Henry T. Byford.—I have only words of commendation for the paper. It is somewhat surprising, with our present knowledge of puerperal fever, that members of the profession will still follow the bad practice of poking their infected fingers about in the cervix after a fontanelle, and then rubbing about after the sutures. It is not only the most dangerous, but the most difficult method of diagnosis. If properly studied, abdominal palpation is more easily learned. When simple abdominal palpation is not satisfactory, bimanual palpation from the vagina is a valuable method even before the cervix has commenced to dilate. With the fingers of one hand over the symphysis, and those of the other under, a large portion of the circumference of the fetal head can be grasped and outlined. When the head lies directly across the pelvis, both sides

will be about the same, or one a little lower than the other, and a triangular space between the pubes and side of the head. When the occiput is normally located, the subocciput will be felt over the pubes and to one side, while the occiput and top of the head as felt from the vagina extend diagonally down into the pelvis toward the other side. When the face is anterior, the facial irregularities may be discovered from above in place of the round hard subocciput, and from below the head extending back across to the other side. When the general contour of the head has been made out or even before this, a fontanelle can usually be felt through the attenuated cervical walls without difficulty. The breech is known by the way it fills the pelvic brim; in face presentations the head is higher in the pelvis, etc. I think that there is no doubt but puerperal septicemia may and does occur when all antiseptic precautions are taken, but in normal labor such is the great exception. The old-fashioned methods of management are more often at fault.

Dr. H. P. Merriman.—The paper seems very excellent and very modest. We ought to use and familiarize ourselves with the method sufficiently to gain the touch, the learned touch, which will enable us to recognize what we need to know without the introduction of the finger into the vagina. As to the question of sepsis, which is referred to in the paper and discussed slightly, I think it is something that is worthy of a great deal more discussion than we have yet given it. As to the introduction of sepsis by the attending physician, and as to methods of prevention, the cases of child-bed fever that the majority of us have, are not always among the patients where we would naturally expect that such a thing should take place—among the careless and the slovenly—they occur fully as many times among the neat, among the clean, and with the careful physician, as they do with the physician who is careless, and it strikes me we have not yet arrived at a sufficient knowledge in this matter.

Dr. James H. Etheridge.—I was thinking, while the paper was being read, of the advance that has been made in obstetrics since I read medicine. All this idea of puerperal fever being sepsis has come up since then. Every once in a while we are finding another new thing. In the subject of abdominal palpation, this writer goes a step beyond, and gives us a glimpse of possible medico-legal complications in the future of obstetrical work. I wonder how long it will be before a suit will be entered against practitioners for malpractice, something like this: A woman is delivered, puerperal fever sets in, and she dies. By reference to articles like this, it is determined pretty definitely that this woman got sepsis from the physician's hands. If this paper, or articles similar to this, become incorporated in regular works on obstetrics, will it not be brought to the test at last in a court? If a man delivers a woman, and she has puerperal fever and dies, will he not be liable to criminal prosecution because he touched her? As to the subject of the paper itself, I can say nothing, as I know very little of the topic. If we are, as a society, to indorse that part of the paper which discourages examination by means of the finger in the vagina, it seems to me we should call a halt on such papers. The point is this, if we receive that paper without taking a rather decided stand against its drifting into medical literature, we are indorsing such ideas, we are placing ourselves directly in the way of having malpractice suits. I do not believe it is possible for a man to acquire the skill to tell what a presentation is by palpation, unless he has had an enormous experience under skilled instructors.

Dr. W. W. Jaggard.—Dr. Hoag's paper is a valuable supplement to the President's recent able enunciation of the Semmelweiss doctrine of puerperal fever. The two papers constitute by far the most important work of an obstetrical nature this society has performed during the year. Before this discussion I was inclined to the opinion that both papers were works of supererogation—so much has been spoken and written of the same tenor on these topics without

the slightest dissent. The discussion, to-night, however, has demonstrated that such an opinion was totally erroneous. The outspoken skepticism with reference to the Semmelweiss doctrine of puerperal fever, and the value of abdominal palpation in obstetrical diagnosis, is probably due to inattention to the medical literature. Certainly the views expressed to-night on puerperal fever—as autogenetic and essential — are, as Fritsch remarks, antedeluvian.

The adequacy of the method of obstetrical diagnosis by abdominal palpation and auscultation has been demonstrated, and its value is no longer a legitimate subject for discussion before a society of specially trained practitioners such as our little association claims to be. Litzman has relied almost exclusively on the method in his clinic at Kiel, since 1865. Halbertsma. Winckel, and, Breisky permit vaginal examination of parturient women, for the sake of diagnosis, only in exceptional cases. Credé has recently re-affirmed his perfect confidence in the adequacy of the method. French observers laud abdominal palpation in extravagant terms. The admirable treatises of Parvin and Lusk contain clear, distinct descriptions of the procedure.

There are no inherent difficulties in the mastery of the method. The methods of physical diagnosis, as applied to the thorax, involve the exercise of the faculty of attention in a much higher degree, and demand longer and more constant practice. No medical man here to-night doubts the value of abdominal palpation in the diagnosis of pathological abdominal tumors, nor is willing to admit his inability to adequately practise the method, even without "the enormous experience under skilled instructors," to which the gentleman who has just taken his chair has alluded. Dr. Hoag might well have included in his summary of the advantage of abdominal palpation in obstetrical diagnosis, its extreme value in the evolution of the sense of touch, capable of application in diagnosis of all forms of abdominal enlargement.

One gentleman has spoken feelingly of the possibility of medico-legal complication following upon the general acceptance of the Semmelweiss theory of puerperal fever. I hope to be pardoned for saying that this curious and amusing application of the doctrine of expediency is wholly irrelevant to the subject under discussion. The truth or falsity of the theory alone concerns us. Of course, the belief that every case of puerperal fever arises from the absorption of decomposing organic matter from lesions of the genital tract, and that the *materies peccans* is introduced from without, throws a tremendous weight of responsibility upon the physician and nurse. Provided the patient has been surrendered entirely to their control, and she becomes the subject of puerperal fever, one, or other, or both, have directly or indirectly infected her. The atmosphere, as a bearer of infection, may be excluded in the majority of cases.

As a matter of fact, such medico-legal complications have already arisen in Germany. Strenuous efforts, successful in part, have been instituted to secure legislation, requiring midwives and others practising obstetrics to use all antiseptic precautions in conformity with the theory mentioned. Another gentleman has said that my views on the subject of puerperal fever are intolerant. Will you permit me, in reply, to quote an apposite remark from the little book of Dr. Kucher, himself an honorary Fellow of this society?

"We allow any physician the greatest liberty in his view and treatment of a case of hysteria or the administration of some internal medicine, but the most liberal of us becomes intolerant in a case of luxation, and do not hesitate to denounce as an ignoramus or humbug a physician who proposes faith cure or some internal medicine for the luxation. Our intolerance as to the treatment of a luxation will cease at once, when we have seen cases of luxation reduced by faith cure or medicine, and not before. For the same reason the upholders of the Semmelweis theory, and therefore antisepticists, are intolerant in their views on puerperal fever. It is a ques-

tion of vital importance, about which they have the firmest conviction, based upon most conclusive evidence."

The President.—We have men in our society who have believed for a long time that if septicæmia takes place after any obstetrical or large surgical operation there is a very grave doubt as to whether the operator is responsible for it. We cannot avoid taking up such questions; there is not a book on obstetrics written within the last seven or eight years, but takes up and indorses the views advanced by the paper read this evening.

Dr. Etheridge.—Do any of these books recommend the attending of cases of obstetrics and not examining through the vagina?

The President.—They recommend, as far as possible, the examination shall be by abdominal palpation, and that the physician and nurse shall go to the bedside, absolutely clean, which I say is not done in the majority of cases.

Dr. H. P. Merriman.—I feel inclined to take issue with Dr. Jaggard upon this point. It strikes me that the vagina itself is not a very clean place in the majority of women, and that there is as much liability to sepsis from the vagina itself as from the physician's hand or finger. I should very much dislike to take a sponge or anything that contained a portion of the fluid of a woman in labor and bring it in contact with a wound where I wanted to guard against sepsis and against poisoning. I should be very much afraid to take any of that fluid and bring it in contact with the wound in an ovariotomy, or to make a vaginal examination and then proceed at once to the operation. Supposing I pass my disinfected finger into the vagina and then, without any new disinfection, proceeded to an ovariotomy, I should expect trouble. It strikes me we have more danger from an unclean vagina than from the hands of the physician. I do not imagine that in the majority of instances the finger of the physician is such a contaminating source of trouble as is claimed. If this is the case, if it is all brought in from the outside, we ought to insist that there shall be no sheet used on the patient, no garment brought about the bed, no old quilt or anything of that kind placed in contact with her that has not been just washed and disinfected, and we should insist upon that at the beginning of labor the vagina should be thoroughly disinfected by being douched with a corrosive solution, in order to prevent this danger of contamination to the patient.

Reviews, Books and Pamphlets.

A Practical Treatise on the Diseases of the Scalp and Hair. By George Thomas Jackson, M.D., Instructor in Dermatology in the New York Polyclinic, etc. New York: E. B. Treat, 1887. Price $2.75.

The author has produced an excellent treatise on a very troublesome and often obscure class of diseases. The affections of the scalp and hair are considered with sufficient fulness to enable anyone to recognize them and treat them with success.

The book is not padded with long-winded discussions of theoretical points, but an eminently practical character is maintained throughout. We can cordially recommend it.

Forms of Typhoid Fever Simulating Remittent Malarial Fever. By I. E. Atkinson, M.D., Professor of Materia Medica and Therapeutics, and of Clinical Medicine in the University of Maryland. Reprint from *Medical News*, August 13, 1887.

Cyclic Albuminuria. By William B. Canfield, M.D., Chief of Throat and Chest Clinic and Lecturer on Normal Histology, University of Maryland, etc. Reprint from *Medical News*, July 30, 1887.

Syphilitic Headache, when violent and obstinate, can be relieved in from two to three weeks or less, according to Leroy, by the use of aconitine, in doses of half a milligram, twice daily.—*Annal. de Derm. et de Syph.*, February, 1887.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, OCTOBER 1ST, 1887.

Editorial.

THE RESPONSIBILITIES OF THE MEDICAL STUDENT.—During the next two or three weeks a large number of young men will enter upon the study of medicine at some one of the various medical schools throughout the country. It is proper that these young men should be told in advance something in regard to the responsibilities they will assume as students of medicine. As it is not probable that our remarks will reach any large number of this class our advice may appear somewhat gratuitous.

It is to be hoped that every young man who proposes attending lectures during the present winter has studied under a competent preceptor and that he has accordingly received some instruction in his medical studies. What is more important, we trust that each preceptor has impressed upon the mind of his student a sense of the responsibilty and claims of medicine. If this has not been done our suggestions may not be out of place at this time, for we consider the duty of the preceptor towards the student as of primary importance to the duty of the student towards the profession he proposes entering. In foreign countries—Great Britain and Continental Europe—the courses of medical instruction and the requirements for medical practice are so much more thorough than on this side of the Atlantic that few young men have the boldness to enter upon the study of medicine without previous training and a careful preparation for professional work. Unfortunately we lack these important incentives to study and we think, therefore, the responsibilities of both preceptor and medical student are vastly increased. There are institutions in America that will welcome any young man into the ranks of the profession, no matter how ignorant or stupid he may be. There are also physicians who will encourage any young man who may seek advice to enter upon a career which they must know he is wholly unfitted for. The physician oftentimes acts from a sense of gratitude to his alma mater, whose empty benches he would vainly seek to fill, or, perhaps, the son of some influential patron may be the student in question and he can ill afford to frown upon his incompetency. So long as low grade medical institutions exists and thoughtless practitioners ply the trade of preceptors the ranks of the profession have little protection from the inroads of ignorant and incompetent men. But our remarks are not intended for this class. We assume that the vast majority of the young men who enter the profession do so with high and honorable motives, and are earnest and anxious in their desire to secure a thorough medical education. Such young men are willing to follow the best methods if they are pointed out to them. The majority of them are, as a rule, good students and really want to prepare themselves for professional work.

To such young men we would give encouragement and sound advice. If they have not been informed by their preceptors of the claims of medicine upon them and of its responsibilities they will probably be told this by their Professors in "Introductory Lectures," provided they enter upon their lectures at the very beginning of the course, a by no means invariable practice.

It seems to us the most important question for the young student to decide is the selection of a medical school. This may be no easy task considering the claims of many institutions and of different cities. So far as the student

is concerned the selection should be honestly made. The young man wants a thorough medical education. He should therefore matriculate in a college where the corps of teachers is known to be thorough and competent to instruct, and where the advantages offered him as a student are commensurate with his needs. Having selected his school the student should attend lectures and clinics regularly and conscientiously. He should take full notes of the more difficult lectures, and after lecture hours should either study his notes or read over the subjects taught in authorized text-books. It would be wise for each student to enter some one of the conventional college quiz classes. He will here learn much that is of value to him. The earliest possible opportunity should be embraced for the study of practical anatomy in the Dissecting room. The habit of simply mutilating an extremity and calling this a dissection is a mere waste of time and material. The student should endeavor to dissect an entire subject, and he should do his work carefully and with a definite object in view, which should have a higher aim than a simple compliance with the requirements of the Demonstrator's rule. The short courses of five months, still adhered to by the vast majority of medical schools on this side of the Atlantic, makes it absolutely obligatory upon the student to employ every hour of his working time in study. With the multiplicity of lectures and the various new subjects introduced into the course of study the student must work early and late to keep pace with the course. The incentive to redoubled exertions has been so greatly increased by this short stage of pupilage and increase of medical knowledge which now confront the medical student, that the old conventional habits of the student must be relegated to the past. Work earnest and sincere is the chief prerogative of the medical student of to-day who fully comprehends the responsibilities of his profession.

The student must early learn to sift the rubbish from the golden grain, if he would make safe progress in medicine. There is so much that passes for the genuine coin in the literature and practice of medicine, which after all is only the baser metal, that the student is constantly in danger of storing up that quality and character of information that will not supply his needs in after life. He is so apt to be carried away by the glitter and parade of great theories, striking surgical exploits and the novelties of practice that the solid ground work of anatomy, chemistry and physiology is less attractive to him as an important feature of his education. The foundation of success in medical work must be laid upon an intimate knowledge of the principles of medical science. It is far more important that the student should have this knowledge than that superficial information which facinates by its novelty and apparent luster. It may be eminently proper that the student should witness a nephro-lithotomy or pylo-rectomy, but any amount of time devoted to the study and consideration of such rare, yet brilliant surgical procedures, is a practical waste, since it must be given at the sacrifice of those more common studies which more directly bear upon his future work. The student who is facinated by the exploits of the renowned surgeon or classical lectures of the teacher of practice of medicine and gives his entire time to the study of these branches, to the great neglect of his anatomy, chemistry or materia medica, is in great danger of weakening the foundation of his entire professional edifice.

These words of caution cannot be too ernestly addressed. The neglect of anatomical study, the inattention given to physiology, chemistry and materia medica are great elements of weakness in the professional training of many physicians. We repeat, the student who sacrifices those studies upon which all scientific medicine depends, for the more brilliant and attractive branches of surgery and practice, is virtually undermining his usefulness and success in his subsequent professional work. Our space does not admit of a fuller consideration of the duties of the medical student We must close with the simple reminder

that success at college and success in the broader field of medical work outside of the college walls can only be earned by earnest, honest, untiring industry and perservance. The young man who attempts to achieve an honorable position or a wide distinction in the ranks of the profession he has entered should at once realize the force of this statement and begin with a firm resolution to do his full duty. The ranks of the profession are full to overflowing with idlers and drones. There is no room for more of this class.

But to those who wish to do good work, who would add to the knowledge of scientific medicine, who would cultivate a broad charity and ennoble the grand profession of the healing art the portals of medicine are open and willing to admit him. Let all such press in. Let those who have less noble motives stay out.

The Progress of Gynæcology.—In the Presidential Address before the American Gynæcological Society, at its late meeting, Dr. A. J. C. Skene took occasion to comment upon the gratifying growth of gynæcological science during recent years. He offered a number of instructive facts in support of the statement that modern gynæcology was not much more than seventy-five years old and yet had made wonderful progress, especially in the department of surgery. Of the most heroic operations in surgery ten were claimed by Dr. Skene as gynæcological. Over 780 gynæcological instruments had been devised, exclusive of the different varieties of needles and sutures. About three hundred different pessaries were in use. Within three-quarters of a century about six thousand books devoted to the diseases of women have been published, whilst in the past eight years seven thousand five hundred and five journal articles and pamphlets on gynæcological subjects have appeared.

From these statistics no one can doubt that the gynæcologists have been extremely enterprising and industrious. We much doubt whether any other special branch of medicine or surgery can present such an array of instruments or profusion of literature, and if all these count for progress gynæcology has certainly made great advances. But as much as we are disposed to praise the eminently good work which the gynæcologists have done, we would prefer to measure their results by some other standard than instruments, pessaries and pamphlets, or even text-books. These may either have contributed in some degree to the good results which the gynæcologists have scored or may be a fair index of the ingenuity, skill and energy of these busy workers, yet we venture to suggest that the science of gynæcology has found a higher position than such a showing, as Dr. Skene has made, would make appear.

Such statistics do not make it appear how much abdominal surgery owes to gynæcology, nor to what extent antiseptic surgery is indebted to the same source for its successful elucidation and application. It cannot be questioned that the surgical side of gynæcology has been eminently heroic and valuable in its contributions to the relief of womankind. We wish we could say the same of the medical treatment of functional and organic diseases of women. Just in this latter direction there is much room for the exercise of much of that talent and ingenuity which has devised instruments, pessaries and created a vast periodical literature. Dr. Skene very properly dwells upon the importance of this field and attempts to lift it into greater prominence. We quite agree with Dr. Skene in the statement that the Gynæcological Society, now twelve years old, has done much to promote a healthy study of gynæcology and to enforce more rational methods of practice. We must look to just such organizations as this for sound and wholesome views upon scientific subjects and for the elimination of the great accumulations of trash which encumber the work and literature of the profession of medicine.

Miscellany.

The Treatment of Primary Syphilis.—At a recent meeting of the Vorein der Aerzte in Steirmark (Society of

Physicians of Styria), Professor E. Lipp made an important communication on this subject. He had tried to influence syphilis during the short period in which it had not yet become a constitutional affection in such a way that the virus was prevented from infecting the whole organism, or that, at least, the course of the disease was a more favorable one, and of shorter duration. The excision of primary sclerosis, as recommend by Auspitz, Neusser, and others, belonged to the experiments which tried to make syphilis abortive, but this treatment was not successful in all cases, owing to infection of the lymph-vessels of the adjacent parts. He, himself, had made several such experiments without having attained the effect which he desired, viz., to prevent universal syphilis from establishing itself in the organism. The defenders of excision were gradually yielding, though they could now and then boast a success with their treatment. The value of the simultaneous extirpation of the lympth glands was very problematic, and might under certain conditions even prove fatal. Professor Lipp had in his own experiments paid the greatest attention to the local and regionary treatment of the syphilitic affection without, however, neglecting the general treatment. He almost exclusively availed himself of the preparations of mercury which were the most efficient antidote against syphilis. For the local treatment he particularly recommended subcutaneous injections near the affected lymph-vessels and lymph-glands, as by this procedure, the remedy came into intimate contact with the virus, and the syphilitic affection in the enlarged and indurated lymph-glands thus quickly and surely underwent a regressive process. This fact was of great importance, though, on the other hand, the spreading of the virus by the blood-vessels of the primary focus was not to be underrated. A somewhat energetic local treatment derived the importance of a constitutional one, as the medicament being subcutaneously applied underwent resorption into the circulatory system. It was surprising that the influence on the whole organism of such a regionary treatment could be overlooked by the profession. Out of ten females who were in this way treated by Professor Lipp, four did not show any symptoms of general syphilis, after the lapse of two, one and a half, and one year from infection; five patients presented only slight symptoms of general syphilis and in only one of these he observed all symptoms of a general affection, this patient, however, could not support the mercury preparations well, and was, for this reason, not energetically treated. In one of the four quite successful cases, the primary sclerosis had been extirpated. The speaker remarked, among other things, that unsuccessful experiments should not deter from undertaking new and modified ones, unless one wished to make it an axiom that syphilis must take its regular course from the local foci to the infection of the whole organism.—*London Medical Press.*

Sir Morrell Mackenzie.—Dr. Mackenzie was summoned on Tuesday to Balmoral to receive the honor of knighthood at the hands of Her Majesty, in recognition of the great service he has rendered the royal families of England and Germany—and, it may be added, the whole of Europe—by his skilful treatment of the Crown Prince. We are sure that, in this case at least the profession will agree that the dignity, such as it is, has been thoroughly well won. The condition of the Prince is satisfactory, and there is every reason to believe that the favorable prognosis, which has been steadily adhered to by those best qualified to judge, will be completely justified. Mr. Mark Hovell will continue in attendance on His Imperial Highness during his stay in the Tyrol, Sir Morell Mackenzie will also visit him occasionally.—*British Medical Journal*, Sept. 17th, 1887.

The Antiseptic Power of Vinegar.—Englemann (*Arch. Gen. de Med.*) has been experimenting upon the antiseptic power of vinegar, having used it in diphtheria with better results than were obtained from the use of any other agent. He used either ordinary vinegar

or the officinal acetic acid, applying it by means of a brush or as a gargle. In the latter case he added double the quantity of water. He found that its power to prevent the growth of bacteria surpassed a five per cent. solution of carbolic acid.—*Canada Lancet.*

Medical Items.

The Pasteur Institute Fund at Paris now amounts to nearly two million francs.

The *Philadelphia Medical Times*, owned by J. B. Lippincott Company, has been purchased by Drs. Frank Woodberry and Wm. F. Waugh, who now become proprietors and editors of the publication.

Fazio having concluded upon theoretical grounds that injections of quinine were indicated in splenic tumors due to malarial causes reports his results in two cases in which this method was tried, and claims to have obtained a decided diminution in the size of the tumors after respectively 32 and 45 injections. —*Med. and Surg. Rep.*

Dr. N. H. Taliaferro, a well-known physician of Atlanta, Ga., died on September 17th at the age of 55 years. Dr. Taliaferro was Professor of Obstetrics and Diseases of Women in the Atlanta Medical College. He was one of the best known Gynæcologists in the South. He was born in Savannah, Ga., but has lived in Atlanta for the past fifteen years. During the late war he held a position as a surgeon in the C. S. Army.

Carbolic Acid in Otitis.—Dr. Hartmann during the last year has treated moderate otitis with instillations of several drops of a solution (1 in 10) of carbolised glycerine. The results were excellent. Pain instantly disappeared, and the progress of the affection was checked. In cases where effusion existed, the relief obtained was equally great. M. Rohrer, who confirms M. Hartmann's statement recommends a solution of 20 per cent.—*British Med. Jour.*

The *Gazette des Hôpitaux* relates a remarkable case of cure of lumbago by subcutaneous injection of antipyrin, observed in a man aged 42, a patient at the Hotel Dieu. He could not sit down, and once in bed could not sit up. The lumbago was rheumatismal, for his fingers and toes were also swollen. After a first subcutaneous injection of 50 centigrammes of antipyrin, the lumbago completely disappeared. The injection of 50 centigrammes of antipyrin was continued every morning and evening, and at the same time 3 grammes were administered by the stomach. The action upon the fingers and toes, although not immediate, was very rapid. The man is now perfectly cured.—*Brit. Med. Jour.*

During the meeting of the Ninth International Medical Congress at Washington the headquarters of the Association of Medical Editors was visited by the entire delegation, from time to time, and, it may be, an occasional American member called. The secret of attraction, upon close inquiry, turned out to be a distilled extract of maize, known in Kentucky as McKenna Whisky. The Irish delegation gave their unqualified indorsement of its excellent character; the English doted on it; the Italian said it would save life; the Russian embraced it fondly; the French took it early and often with enthusiastic applause. It went everywhere on its holy mission, and became the only hope and solace of the entire Congress from early morn to dewy eve.—*Med. Register.*

Antipyrine has been all the rage this last year with Professor Gemain Sée. He again comes forward to tell of its good effects in headache, migraine, and facial neuralgia, which seems to be incontestible, but most of these results are obtained by hypodermic injections of the drug, and, as they very often give rise to local manifestations that are very annoying to say the least, it may be well to give the means used in Dr. Sée's service to prevent them. The local inflammation and pain are often quite intense, although they soon wear away, but the swelling produced by the liquid introduced very often remains and often freightens patients so they will not submit to the injection. M. G. Beaudoin, an interne at the Hôtel Dieu, gives the means used there to prevent these bad effects.

First of all, the needle must be introduced *deep* into the tissues, and the injection should be introduced *very slowly*, so that the liquid will pass into the tissues progressively and regularly. In order to facilitate its diffusion, the ends of the fingers of one hand should perform a slight massage at the point of penetration of the needle. It would also be well to give several small injections at different points slightly removed, if the patient is not too sensitive to the prick of the needle. Part of the pain felt is due to the concentration of the remedy, so that it is best to use diluted solutions, 25 centigrammes [about 4 grains] of antipyrin to each cubic centimetre of liquid.

But there are some cases that call for a more rapid action, and a gramme [about 15 grains] of antipyrine must be used at once. Here it is of advantage to use cocaine to act locally on the tissues injected. The following is the formula used:

Antipyrine, Water, } each 1 gramme [about 15 grs.];

Cocaine hydrochloride 0.015 gram. [about ¼ gr.]

For those who are extremely sensitive to pain, the dose of the cocaine can be increased to 0.020 gramme [about $\frac{3}{10}$ grain]. The results in facial neuralgias, tic douloureux, etc., have been wonderful. In these last cases 5 grammes [about 75 grains] daily were given internally together with the use of the hypodermic injections.—*Paris Cor. N. Y. Med. Jour.*, Sept. 24, 1887.

Original Articles.

OBSERVATIONS IN VIENNA. THE GENERAL HOSPITAL, BILLROTH, CARL BRAUN, BANDL, AND OTHERS.*

BY CHARLES W. EARLE, M.D., OF CHICAGO.

The general plan of the great Vienna Hospital is familiar to many Americans, for it is here that scores of young men at the present day and a few of the seniors, in days past, have journeyed to continue their studies or prepare themselves for some of the specialties. It was founded by King Joseph in 1784. This ruler hated the Catholics and confiscated many of their schools and convents pulling down some and making public buildings and hospitals out of others. He reigned only ten years, was very unpopular, and even to this day it is not permitted that his memory shall be publicly celebrated. Three years ago, the one hundredth anniversary, an attempt was made to inaugurate a public demonstration, but privilege was denied by the government. A small statue, erected to his memory, was not permitted to be placed in the first court, but relegated to the second, a more obscure place.

Certain rules were inaugurated at the founding of the hospital, which are in force to-day. Among them is one providing that an autopsy shall be performed on all who die if it is regarded of any interest to the professor of pathology in the University, and if this official thinks it for the good of science or for the interest of humanity, a body may be disintered for the purpose of autopsy. Another rule is that any pregnant woman belonging that country can come to this institution, write her name on a piece of paper which is enclosed in a sealed envelope, give any fictitious name she desires, and be confined without publicity. If, for any cause, death should take place, the envelope is opened to ascertain her correct name in order to communicate with her friends.

It is well known that in the lying-in wards of this hospital more than ten thousand women are confined yearly, most of them being unmarried. At the end of a few days, the children are sent to a foundling's home in the vicinity, and it is said that it is from these places that the Austrian army is recruited. When the children are deposited in the foundling's home, there is a deposit of three hundred guldens made for the education of the child, and inasmuch as the great majority die and the money is still left, this is quite a pecuniary help to the institution. I was told that among the lower classes of women in this country, it is regarded a greater crime to procure an abortion than bear children. These girls seem to care but little in regard to becoming pregnant, but are very conscientious in regard to bringing about abortion. With the exception of what little is received from patients, the hospital is supported by the government.

Among the distinguished men who have occupied positions in the obstetrical department in this University are Boër, 1784 to 1823; Klein, from 1823 to 1856; Semmelweiss, from 1847 to 1849, who was the first to commence the use of disinfectants which were at that time permanganate of potash and hydrochloric acid. Carl Braun was assistant from 1853 to 1856, and from 1856 to date professor. Spaeth was prominent in one of wards from 1859 to 1886. Breisky, as is well known, became his successor. Gustav Braun's wards are used very largely for the education of midwives, and I can say but little in regard to his work. He was being credited as the discoverer of the injurious effects of sublimate intrauterine injection when given within a few days after delivery. It was claimed that he detected the drug in the discharges from the bowels, and the practice of using it had been discontinued except in rare cases, and then the operation was always followed by copious injection of carbolized or pure water to wash out the bichloride.

A woman, to enter the ward for instruction as a midwife, must be 24 years of age, and must be able to read, write

*Read before the Chicago Gynæcological Society,

and know something of mathematics. The course is of six months' duration, and after engaging in practice they are only allowed to take charge of normal labors. They may give a carbolized douche, introduce a catheter, and administer some of the mild infusions. They are not permitted to treat placenta previa, perform version, or assume the responsibility in difficult or serious cases.

Breisky was the successor of Spaeth, the latter gentleman having been infected by a patient, and forced to retire on account of cerebral disease. Through the kindness of Dr. Pischacheck (Breisky's house physician), I was admitted at all times to the ward. The practice differs from that in Carl Braun's department whose work I will call attention to in succeeding pages.

The method of *disinfecting* the wards in this hospital is worthy of our consideration. There are about thirty beds in each ward, and these are occupied by only one set of patients between the fumigations. It takes about a day and a half to two days to fill up a room and ten days before they are discharged. Then the ward is fumigated by allowing sulphur to burn for several hours, and all of the utensils and instruments and bedding and beds are exposed to this process. Previous to this, the beds are all washed with a solution of carbolic acid and then with a solution of carbonate of soda. All blankets are dusted and beaten, and then exposed to the sulphur fumigation. It is in this way that the atmosphere in these wards is made so perfectly pure and infection prvented. The beds are of iron, and woven wire takes the place of all mattresses. The pillows are made of straw so that they can be destroyed without any loss at any time.

The bed is made up so that it can be changed without inconvenience to the sick woman.

First two blankets are placed on the woven wire, and over this an oil cloth, then a sheet, and finally another sheet folded so that it is shaped something like a letter V, which is so placed that it comes just under the back of the lying-in patient.

In the Spaeth-Breisky wards, forceps had been used 78 times in 2,761 deliveries, or once in 35 cases. Only 16 deaths had occurred in 3,000 confinements, and the infection was attributed to a young Englishman who was said to have entered the wards from the dead-house without proper disinfection.

At any of the larger operations in the cavity of the uterus in the course of a confinement, a large iodoform suppository, made after the following formula, is always introduced: Iodoform, grains 25 to 75; Gum-arabic, Glycerin, Starch, equal parts. Iron is given very rarely; indeed but little medicine is administered.

The mortality was $\frac{57}{100}$ of one per cent. If a woman has any elevation of temperature after confinement, she is at once removed to another ward, given a carbolized intrauterine douche, plenty of wine, and sometimes a little iron and quinine.

Peripheral thrombosis is treated as usual, although the mercurials at this hospital and in Italy were rubbed into the parts affected more frequently than I had observed in this county.

All abrasions of the labia and contusions of the vagina, taking place as a result of parturition, were freely covered with iodoform and allowed to granulate while this medicament remained. If the lochia remains bloody after the fourth day it is regarded abnormal, and the cause carefully ascertained. It may be caused by a clot or by catarrhal endometritis. The curette is not used as frequently as in Carl Braun's wards. The indications are met with ergot, then intrauterine douches, then the curette.

In these wards a one per cent. solution of nitrate of silver is always instilled into the eye of a baby immediately after its birth.

Rickets in Vienna is called "the English disease," because some English physician first described it. It is much more common with us, although I saw its most dreadful results in the city of London.

I noticed with great astonishment that nothing is used to dry up the mammary secretions after a baby is sent to the

foundling's home, and I am at loss to account for the ease with which the process is completed, inasmuch as it troubles us to a great extent in many cases.

In Spaeth's wards, one's hands are cleansed by the use of a powder made by grinding up bitter almonds, both shells and kernel. It seems to possess great cleansing and absorbent properties.

The operations and lectures in Carl Braun's department take place in a small amphitheatre in his division of the hospital. It would be regarded an affliction by American students to be compelled to occupy a lecture room with as few accommodations. The light is good, however, the surroundings aseptic, and this is about all one can say in regard to the lecture room.

Carl Braun does but little teaching or operating, or at least this was true during my visit. Sometimes during an operation he would come in, and at other times at the commencement of the hour would walk slowly into the amphitheatre, always short of breath, bow to the class, and with the words "Meine Herren," seat himself in a chair constructed entirely to suit his proportions. Drs. Pritzel and Gerlach were his most able assistants. His eldest son was in training to take one of these responsible positions; but from a letter recently received by the secretary of the Chicago Gynæcological Society, it would seem that it was this young gentleman who was referred to as having recently died, and to whom the venerable Hofrath referred to in such affectionate terms.

In Carl Braun's wards, the touch course is followed by many, and the instruction received is of great value. The skill, which is attained by some of those who constantly follow this course, is quite remarkable. They will point out the broad ligaments and ovaries along the sides of the uterus, detect a limb or foot, and distinguish the head or breech with astonishing celerity. Before all examinations, the hands are scrubbed with a brush in soap and water, then dipped in a solution of permanganate of potash, and finally into a solution of muriatic acid.

The display of instruments is very great, as many as twenty or thirty different varieties of forceps would be shown; also great numbers of perforators and cranioclasts. It seems that Carl Braun has devised but few instruments, but has made modifications of nearly every one's and it is the custom to exhibit the original instrument, and then it is always expected that Carl Braun's modification will be produced afterwards.

A favorite method of treating the hyperemesis of pregnancy is as follows:

A rubber speculum is introduced into the vagina so that the neck of the uterus is engaged as much as possible, when the outer end is elevated, and a ten per cent. solution of nitrate of silver is turned in so that the neck of the uterus is bathed with it for some ten minutes.

The successive steps at delivery of a child in Vienna are as follows: First, cleanse the rectum; support the perineum; do not allow the fingers to touch any part of the vagina if it is possible to avoid it. After birth, put the child on its right side to give its heart the best chance. Do not tie the cord until it stops pulsating. Give the child a full bath. The joints of the child, particularly, are rubbed with oil or lard. A small injection is thrown into the rectum to see if the parts are normal. A solution of nitrate of silver is dropped into its eyes. The child is then dressed. Episiotomy to prevent laceration is frequently performed.

The conduct of Germans, about to undergo an operation, is characteristic. They seem to care very little for the operation, take an anæsthetic and go through all the exposure and suffering without apparently a particle of diffidence or hesitation. I saw but one woman in these wards who acted like an American. She appeared to be sensitive to an unusual degree, and diffident when subjected to the usual exposure.

In many of the cutting operations of the vagina, involving also the uterus, constant irrigation with carbolic acid or sublimate is kept up. The total extirpation of the uterus is practised and believed in, in this hospital, and quite fre-

quently performed. They have read Dr. Jackson's paper on the unjustifiability of the operation for cancer, but do not agree with him. They say that formerly they thought and taught as he does, but greater experience has brought them to accept the operation. The details are somewhat as follows: After all the antiseptic precautions, the uterus is pulled down, an incision is made in the cul-de-sac and the finger introduced. A small amount of tissue is cut upon the left and right side, and ligatures and sutures involve both ligamenta lata, the fundus of the uterus is pulled out by retroverting and the remaining tissues cut off. What little hemorrhage remains is controlled, the cavity thoroughly washed out with bichloride or some other disinfectant wash, and then a large tampon of gauze and iodoform inserted. Ice-bags are placed over the lower part of the abdomen, sufficient opium given to quiet pain, and the patient removed to her bed. At the end of the fourth day the tampon is withdrawn, and on the fifth a douche is given by the surgeon himself. No nurse, however efficient is trusted with the first injection.

Ice is used to a much greater extent to combat inflammation than with us. During the first stage of cellulitis or peritonitis, and after laparotomy and the major obstetrical operations, it is always applied. In the use of electricity, particularly in extra-uterine pregnancy, the Germans are not as skilful as Americans. I do not think that, at any time, did I see such a complete exposition of this treatment as many Americans have given, particularly Thomas of New York.

Craniotomy is performed here for causes which would with us seem hardly sufficient. For example, if forceps are applied, and the head does not commence to descend after a rather slight attempt at traction, they would be thrown away and craniotomy performed. In contracted (slightly) pelvis through which, in many cases, we would deliver a living child, craniotomy would be performed without the least hesitation.

The details in a case of craniotomy may be of interest, although it is possible that here we would not have regarded it as indicated. It was not known that this woman had a contracted pelvis. The liquor amnii had drained away several days before, the os had dilated to a considerable extent, and there was no reason to believe that she could not terminate her labor without interference. Her pains, however, were not good, and the os failed to dilate to its full extent and the head would not enter the superior strait. Her pulse and temperature were high, and there was evidence of air in the uterus and septicæmia before the termination of her labor. It was not believed safe to allow her to remain longer without delivery, and she was placed under the influence of chloroform for operation. After she was placed upon the operating table, the body was thoroughly washed and a large vaginal injection given. It was now discovered that the lochia had commenced to be offensive, and septicæmia to some extent was undoubtedly present. Sims' speculum was introduced, and the cervix incised a half inch on each side. The parts was again thoroughly washed out. Braun's perforator was used and the first step in the operation performed without difficulty. To wash out the brain substance, a syringe was introduced and a stream of water carried in. The rest of the delivery was accomplished with great rapidity. The cranioclast was applied with ease, traction made and delivery completed without interruption. The hand was then introduced the placenta delivered, and a hot intrauterine injection given. The woman was again placed upon her back and Sims' speculum introduced with vaginal retractors, and a close examination made for tears and lacerations. The neck which had been incised, the vagina and perineum which had been lacerated were all carefully united, something like fifty or sixty sutures being used in all. The child was an immense one, weighing sixteen pounds, without blood or cerebral substance. The woman made a good recovery. There were many criticisms made in regard to this case by the Americans who saw the operation. Among the questions asked were:

"Why didn't they operate sooner?" Second, "Why didn't he use forceps?" Third, Why did he deliver with such rapidity?" Fourth, "Why did he not use Barnes' dilators, hot-water baths, etc., rather than incise the cervix?"

Puerperal Convulsions.—The method of treating this complication is to keep the woman under the influence of chloform and to promote copious perspiration by a full-length hot bath. They know nothing of elaterium or other drastic cathartics with which we reduce the dropsy and carry, in some cases at least, the woman along to safety.

Another operation, this for placenta prævia, may be of interest. The woman had been in the ward several days and on entering had but little hemorrhage, but at three intervals before had lost much blood, so that she was now quite anæmic. She was kept perfectly quiet, no examination being allowed with the exception of a privileged few, and she was watched constantly. At four o'clock one morning pains commenced, and a slight hemorrhage followed. A colpeurynter, dusted with iodoform, was introduced into the vagina and at half-past six the os was dilated so that the operation for extraction commenced. A vaginal douche was given, the external parts thoroughly disinfected, and ether administered. Two or three vaginal douches were subsequently given. When anæsthesia was reduced, the younger Braun introduced his hand between the walls of the uterus and membranes until he could find the feet, when the membranes were ruptured. One foot was seized and brought through the os uteri; in the mean time the condition of the fœtal circulation was being watched carefully. At the end of ten minutes pains came on and some traction was made. The face was made to rotate towards the sacrum and a rapid delivery took place. To complete the delivery with as little delay as possible, the finger was introduced into the mouth of the child according to the classical method, and the body carried well over the abdomen of its mother. Then came the intrauterine douche and the iodoform suppository. Both mother and child made a good recovery.

Billroth's Clinic.—Billroth usually operates in a small room adjoining one of his general wards. The walls of the room are painted and are washed off before each operation. A carbolic acid spray is kept up for two hours. The temperature is slightly increased. The cloths, which are used in the place can be seen in his room. All sponges are soaked in carbolized water for two weeks previous to the operation and are used only once and then destroyed. The limbs and feet of the patient are encased in wollen leggings. In all operations, it appeared to me that they cut wherever they wanted and controlled bleeding by forceps. It is a current remark throughout the wards that there are only three structures which are not to be cut. First, do not cut the pneumogastric nerve; second, do not open the heart, and third, do not cut the aorta. It is much easier to obtain permission to witness an ordinary laparotomy at the general hospital than to see Billroth's private operations at his own hospital, which is somewhat distant from the general hospital. The operations are generally from eight to eleven o'clock in the morning. The instruments used are mostly solid, and throughout all his operations an assistant stands with a Paquelin's cautery ready to assist in stopping hemorrhage. In abdominal operations, the opening into the abdomen is made with great rapidity and when the cyst is large, it is evacuated, not by the trocar, but by making incisions and allowing the fluid to flow off between the limbs of the patient in a little trough made by the rubber sheet. His method of closing the abdominal walls is somewhat different from what I had seen before. There are usually three layers of sutures; the first takes up the peritoneum, the second, the muscles, and the last the integuments. Silk ligatures are used apparently in preference to all others and dropped in all cavities with impunity. First, the silk is boiled for one hour in a one per cent. solution of bichloride; second, it stands in a solution 1 to 1,000

for twenty-four hours, third, it is kept in alcohol or a carbolic solution of 1 to 5,000.

Billroth's Method of Conducting a Surgical Clinic.—The clinical room is in the regular hospital and a small amphitheatre is surrounded with seats. Beneath the seats upon one side the patients enter. Around the amphitheatre are cases filled with instrument. Clinical clerks and assistants are present and the patients are allowed to enter—several being present at the same time. From among the students, Billroth selects a man and calls him into the amphitheatre and he is requested to examine the patient and make a diagnosis. In the meantime Billroth asks him questions and as the fellow becomes confused, Billroth laughs. Sometimes the roll is called and twenty men are found to be absent. Several examinations and operations are usually carried on at the same time.

A boy presents himself with a ganglion. It is crushed with a mallet. Another case can neither stand nor walk. A long discussion takes place and the diagnosis rests between an old fracture, dislocation, or contusion. A child is brought in and a bougie is passed down its throat. Another comes in and the same process is gone through with. At one time, I saw four persons of different ages in Billroth's amphitheatre with œsophageal bougies in position. I found on inquiry, that the large number of stenoses of the œsophagus which present themselves here, are due to accidental drinking of caustic potash by the child. This, I understand, is used in large quantities in washing, and as the mother is busy at her work the child surreptitiously takes a drink.

Laparotomy. — The abdomen is thoroughly shaved and scrubbed and covered with oiled silk through which an opening is made. The incisions through the abdominal wall are quickly made. It is discovered that there are several cysts which make up the tumor, and to evacuate them a trocar is not used. A trough between the limbs of the patient is arranged and Billroth rapidly plunges the knife into one cyst and while the fluid runs out, jokes and enjoys a story with one of the students. He then turns around and plunges the knife into another cyst, talks a little more German with somebody, until finally the growth is so lessened that it is taken from the abdominal cavity without difficulty. The parts cut within the abdominal cavity are frequently touched with Paquelin's cautery, bands are divided between hemostatic forceps, and the abdominal wound closed by the usual method.

Excision of the Pylorus.—This operation is done at a private sanitarium and it is with the greatest difficulty that one gains admission, but with a little American energy it is usually accomplished. The abdominal opening is not unlike that for an ordinary laparotomy, although nearer to the ensiform cartilage and usually not lower than the umbilicus. Billroth introduces his hand and pulls down the pyloric end of the stomach and protects it with a warm carbolized cloth, and keeps all water and fluid from entering the cavity by assistants keeping the edges of the wound closed. One hour is consumed in separating adhesions between the omentum and stomach. A blunt instrument is used which is forced through the tissues, then two ligatures applied and the cutting is done between the double row of ligatures. The next step is to lessen the size of the stomach which is to join the amputated end of the bowel. The malignant mass is then cut out and the end of the healthy duodenum and stomach brought together. Billroth had, at this time, operated eighteen times for this difficulty saving, for a longer or shorter period, eight patients. One had lived five years.

The method by which the stomach is lessened in size so as to fit, if I may use the term, the bowel is much more difficult than it would seem. It appears to me that the books hardly appreciate the intricacies involved. At the remote part of the incision made for this purpose, only the peritoneum and muscu-

laris were divided—nearer to that point which was to be the new pylorus not only the serous and middle layers were included but the mucous—at this point it is sometimes necessary to take out a V shaped piece of tissue. In both cases, however, the sutures involve *only* the peritoneal and middle layers of the organ. Over 100 sutures of this kind were made during the operation. The entire time consumed was two and a half hours.

Billroth does many laparotomies as well as general surgery.

Case I.—A tumor in the left iliac region seemed to be fixed and to be in the peritoneal cavity. All the usual antiseptic precautions were used; an incision made directly over the tumor and it was found to be in the walls of the abdomen. The arteries are tied with silk and the abdominal wound closed with the usual three layers of sutures.

Case II.—The patient has extensive ascites, and a tumor can be detected floating in the fluid. With a few rapid strokes of the knife Billroth enters the abdomen, the water is drained off through the trough. The tumor is found to be connected with the Fallopian tube and is brought out of the abdominal cavity. The pedicle is seized with two artery forceps and ligated between them. The actual cautery is run over the cut surface, and the abdominal wound closed in the usual manner.

Case III.—A woman aborted some weeks ago and had been flowing ever since, presented herself at the clinic. She was placed on the table; no anæsthetic was given. The speculum was introduced; the uterus pulled down; the vagina made antiseptic; an intrauterine douche given; the cavity curetted, again washed out; a suppository of iodoform introduced, and the operation is complete.

Operations for gastro-interostomy. This is for the relief of stenosis of the pyloric opening of the stomach, where the duodenum is occluded for some distance and bound down by adhesions. The incision through the abdominal wall was made the same as for the exsection of the pylorus. The adhesions are found to be so extensive, involving a large part of the duodenum, that the usual operation cannot be performed. It is found impossible to bring up the lower part of the duodenum so that the jejunum is sought for and a very small opening made through the meso-colon and this part of the bowel brought up through this opening. No stitches or ligatures are taken in this opening through the mesentery. The stomach is pulled down and a longitudinal cut made through the walls of the stomach and the jejunum. These longitudinal openings are approximated and in this case the mucous membrane of the two were sutured, then the muscular coat and the peritoneum. In most of these operations the mucous membrane is not sutured at all. If it is, it must be done very thoroughly, else little openings will occur. Usually the muscular and peritoneal coats are the ones united.

Operations for the removal of several sub-peritoneal tumors from the uterus. It was supposed that there was but a single tumor, but on opening the abdomen it was found that there were several. The arteries on each side of the organ were first ligatured. Great trouble was experienced in finding them, Billroth remarking that their relations were lost on account of the growth of the neoplasm. He would feel long and patiently for pulsation in the neck of womb, and would compare it with the radial pulse. This part of the operation consumed three-fourths of an hour. After this, however, the operation was performed with rapidity. An incision would be made through the outer walls of the uterus down to the tumor. He would run his finger around and brake up adhesions with his finger, a knife or scissors. After the tumor was enucleated but little time was spent closing the blood-vessels, the larger ones were tied, but the main part of the bleeding was controlled by closing the wound in the ordinary manner. Four distinct layers of suture were made, silk being used. The abdominal walls were closed in the usual method. The query which arose in the minds of many of us as we looked at the operation was, Would it not have been better to take out the entire organ?

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

SPECIAL MEETING, SEPTEMBER 19, 1887.

The PRESIDENT, J. SOLIS-COHEN, M.D., in the chair.

Dr. F. W. Pavy, F.R.S., of London, addressed the Society upon

SOME MORBID CONDITIONS OF THE URINE.

I must first of all express the honor I feel in being invited to meet with you this evening, and next to apologize for impairment of voice due to cold, and for being under the influence of fatigue from travel.

I am before you to say a few words upon certain morbid conditions of the urine, and my hope is that we may compare notes of observations in the old world with observations in the new world. I shall first of all refer to albumen. Albumen in the urine with us was formerly regarded as a matter of the most serious import, but we are now beginning to recognize that a certain amount of albumen in the urine is not always of grave import. My own practice lies very largely with urinary diseases, and the patients coming under my care always have their urine examined by an analyst; and I am frequently meeting with a certain amount of albumen in the urine, without its presence being attended with anything that would lead me to suspect that a grave condition exists. In association with diabetes, it is not at all uncommon to find, when the patient first comes under observation, a certain amount of albumen in the urine; but when the patient is put under treatment for the diabetes, it is not infrequently found that the albumen disappears in the course of a few weeks. In these cases of albumen in the urine, we must look to the general condition of the patient to see whether or not there are other indications of the existence of grave renal disease.

There is another condition which I presume has been brought before the profession in America, in which albumen exists at a certain time of the day, and not at other. I have suggested for this condition the term *cyclic albuminuria*. I have studied these cases for some years past, and I should think that they occur in this country as well as in the old world. I know that they occur in Germany, for the matter has been taken up there and followed out. This condition is observed in persons who are excitable and of a nervous disposition, and as a rule in young persons, although I have met with some cases in the middle-aged. The albumen is to be met with at one time of the day and not at others. These cases are recognized, as it were, only by accident. Sometimes the urine is examined on account of pain in the loins, but most frequently these cases are discovered through examinations for life insurance purposes, or for some branch of the civil service, as is required by the Bank of England. So long as the individual maintains the recumbent posture, no albumen will be detected, but in one and a half or two hours after rising the maximum quantity of albumen will be found. As a rule, the quantity of albumen declines toward evening, and on going to bed it has entirely disappeared. Sometimes a trace of albumen is to be found in the afternoon and evening, but the first urine passed on rising in the morning contains no albumen whatever. These cases seem to be of no serious import. I suppose that the presence of albumen depends on the condition of the vessels. I suppose so, but certain it is that these cases are not associated with any constitutional condition. I now come across quite a large number of them.

I shall next refer to *sugar in the urine*. This is another morbid element which has varying degrees of importance. In young persons it is of the gravest import, while in elderly persons it is not so serious. In early life I have known cases to go on for years. Ultimately they all terminate unsatisfactorily. After the middle period of life,

however, sugar in the urine has a very different significance. In young subjects we have a disease which seems to be of a progressive nature. Notwithstanding whatever we may do for it, there is something which insidously progresses in the system and leads ultimately to a fatal termination. But after the middle period of life a good deal depends upon the patient himself. Under proper management the disease may, as a rule, be held under control and the patient live for years in a satisfactory condition, but to accomplish this, rigid measures of treatment must be carried out.

One may express in a very few words, and without advocating any idea or theory, the precise nature of *diabetes mellitus*, or sugar in the urine. I should speak of it as a defective or faulty assimilative action—a faulty chemistry. The elements of the food which we take undergo chemical change in the system, by which they are rendered useful. A certain group of principles entering largely into the composition of our food, are the carbohydrates. These principles in diabetes do not undergo their proper chemical change and thus become eliminated from the system. What do we observe in a state of health? A person takes one of the carbohydrate group, it makes no difference which—starch, grape sugar, cane sugar, dextrine, or sugar of milk—they all behave alike in the system, and it is so changed as to be rendered subservient to the requirements of the system. In a state of health, we see nothing more of them. Not so in diabetes. In a diabetic these carbohydrates are no longer consumed. There is a faulty disposal of them. Received into the alimentary canal and afterward absorbed, they do not undergo their proper transformation, but pass off from the system in the form of sugar in the urine; so that I say, looking at these two conditions, a condition of health and a condition of diabetes, we may describe diabetes as a faulty disposal—a faulty transformation or assimilation of the carbohydrate elements of our food. In diabetes, in proportion as these carbohydrates are taken, so will be the amount of sugar in the urine. This I can say without any hesitation whatever.

In order to follow a case of diabetes satisfactorily, I consider that a quantitative examination of the urine should be made, and, for myself, I feel quite in the dark as to the progress of a case unless I have this quantitative examination. In my own practice, I keep an analyst who examines the urine of patients—a night and morning specimen—and directly I get the analytical report, I can read off exactly the condition that I have to deal with. Without this, I should be perfectly in the dark as regards the progress or severity of the case. It does not do to rely on specific gravity. I have met with a specific gravity of 1.040, without any sugar in the urine. Medical men are often concerned over the specific gravity of the urine. The patient may have been put under treatment, but still the specific gravity keeps up to 1.032 or 1.035, although the urine is free from sugar. Under these circumstances, I say to the medical practitioner, do not concern yourself with the specific gravity. If the urine is free from sugar, the high specific gravity is a favorable sign, as showing that the kidneys are equal to good work. If the kidneys were diseased, there would be a low specific gravity. The high specific gravity may be kept up by the passage of only a limited quantity of water, and by the nitrogenous diet which the patient is taking, adding to the elimination of urea. On the other hand, a low specific gravity may sometimes be met with where there is a considerable quantity of sugar in the urine. I have met with a specific gravity of 1.009 or 1.010, and yet the urine contained a considerable quantity of sugar. These have been mixed cases of diabetes insipidus and diabetes mellitus. They are proven to be mixed cases by the fact that when the patient is put under proper dietetic treatment, the sugar disappears, but the quantity of urine keeps up. I myself do not attach so much importance to the specific gravity as is done by certain medical men.

In testing the urine for sugar, my opinion is that the copper test is by far the best. As we all know, Fehling's solution is the test generally employed, but there is this disadvantage about the Fehling's solution, it does not keep well; after being kept some time, it throws down a precipitate without the presence of sugar. This has led to many mistakes in diagnosis. I have frequently had patients sent to me with the statement that they were suffering with diabetes mellitus, when the only trouble was that a faulty Fehling's solution had been employed. Some years ago, I directed my attention to the question whether or not the ingredients of the Fehling's test could not be put together in the form of a pellet, and the solution be made as required. Certain difficulties were experienced at the outset, but these have been overcome. The pellets, as now made, consist of sulphate of copper in the anhydrous form, Rochelle salt, and salt, and potash. This is done by first putting in the die the sulphate of copper, then a little Rochelle salt, next the potash, and, finally, more Rochelle salt. The pellet, after being made, is surrounded with waxed paper and kept in a well-stopped bottle. If properly prepared and handled with care, the cork not being left out of the bottle, these pellets will kept indefinitely. There is this advantage about the pellet —it will never deceive you, for if it is allowed to absorb moisture, it at once becomes unfit for use, the oxide of copper being thrown down in the form of a black precipitate.

In the treatment of diabetes, I attach the greatest importance to diet. I do not consider that you can get on with the management of these cases unless you exclude as far as possible those principles of which there is a faulty assimilation. If sugar appears in the urine, it must previously have existed in the blood. I know from frequent examinations that the blood contains a trace of sugar, which may be represented in figures from 0.5 to 0.8 part per 1000. In harmony with this condition of the blood, there has been a trace of sugar in the urine.

The ammonio-cupric test is the one I employ as a quantitative test. It consists of Fehling's solution with the addition of ammonia. With the Fehling's solu- there is, on the addition of saccharine urine, a precipitate of the suboxide of copper, and for quantitative purposes, this precipitate interferes with the determination of the exact time when complete reduction has taken place. While the presence of ammonia does not interfere with the reduction, it keeps the reduced suboxide in solution, and we get the decoloration without the formation of any precipitate whatever. The addition of ammonia gives a more intense blue color to the Fehling's solution, and this is brought by the reduction to the color of water without the formation of any precipitate. With the apparatus in perfect order, the quantitative determination can be made in two or three minutes. This test is so delicate that ordinarily, to perform it satisfactorily, you have to dilute the urine 1:20, and where it contains much sugar, 1:40. I usually determine the proportion of sugar per thousand of urine, but if it is desired to determine the number of grains per ounce, this can be done by multiplying the quantity per thousand by 0.4375.

In examining the urine of a diabetic, I generally desire that a night and morning specimen be brought. When a person lives as people ordinarily live in England—that is to say, to taking a meal on rising, breakfast; a meal in the middle of the day, lunch; and a meal in the early part of the evening, dinner—the urine passed on going to bed contains considerably more sugar than the urine passed in the morning. When a person dines in the middle of the day and sups shortly before going to bed, then the conditions are reversed—there is less sugar in the night water than in the morning water. Over and over again, by the quantitative examination of the urine, I have detected errors of diet where the patients have had the greatest desire to keep to what was right. A person who has been passing only a little sugar, brings a specimen which contains a large quantity of sugar. Under

such circumstances we must look for some error in the preceding meal. In one case this proved to be blanc-mange which had been made with corn flour. Blanc-mange for the diabetic should be made with cream and gelatine or isinglass. In another case a patient had been passing very little sugar, when suddenly the quantity increased. Careful questioning revealed no error in diet, until it was learned that the patient had substituted for the bran biscuits which he had been using others said to "just as good," which examination showed to be made of the whole meal. I refer to these cases to show the value of the quantitative analysis.

In the treatment of these cases, the exclusion of the carbohydrate elements of the food should be as complete as possible. In the case of a person in the middle period of life, I first put the patient upon a strict diet. Very often the sugar for a time lingers in the urine. It is materially diminished, but has not disappeared. I may also say that I have, in addition, recourse to opium, codeia, or morphia, for I believe that these drugs have an important influence in controlling the disease—or, to put it in other words, they restore the assimilative power. Certain it is that under influence of these drugs and strict diet, sugar after a time disappears from the urine; and after the urine is kept free from sugar for a few months, I find that the individual has a certain amount of assimilative power over the starch of bread. Frequently there is no reappearance of sugar. If there is no return after this has been continued two or three weeks, I increase the quantity to three ounces per diem. Then, if there is no return, to four and one-half ounces; and, finally, to six ounces. Then the person is in the position of a small bread eater. I recommend patients to be content with that. They can very well give up potatoes and sugar, but to give up bread is a serious matter with many people. When a person can take six ouces of bread per diem, he is not in an unfavorable condition. Many of these persons can continue to take this quantity of bread with no return of sugar in the urine. If, however, they go further and resume their ordinary diet, there will be a reappearance of sugar. The urine must be taken as a guide. Treating the case in this way, my experience is that, after the middle period of life, these patients do exceedingly well.

I must apologize, Mr. President, for the crudeness of these remarks, for I have had no time for preparation. I thank you most heartily for the attention which you have given to me. I cannot close without thanking you and your countrymen for the cordial reception given to myself and my confrères by everyone with whom we have come in contact.

DISCUSSION.

Dr. James Tyson said it is needless to say how much indebted we all feel to Dr. Pavy for his remarks, and in the brief time allowed for discussion I desire first to say that I think we, in America, have passed through much the same transition in our views as to the import of albumen in the urine as has taken place in England. The fact is thoroughly recognized that albumen may be present without any serious import; but the explanation of these curious albuminurias is still unsatisfactory. There are a certain number of them which are clearly the result of diet, and may be called alimentary albuminurias, but that all cases cannot be thus explained is shown not only by the cases alluded to by Dr. Pavy, but also in such as those where the urine on rising is free from albumen, but in which within an hour afterward the urine passed is albuminous, although no breakfast has been taken.

The crucial test for the determination of the gravity of an albuminuria is the presence or absence of casts. I have found that in these harmless albuminurias tube casts are invariably absent; and where there is a constant association of albumen and tube casts, it, of course, means renal disease, no matter how slight the general symptoms may be.

With reference to sugar, we also entertain much the same views. In my

hands Fehling's solution has proven the most satisfactory test, although open to the disadvantages alluded to by Dr. Pavy. Much, however, may be done to preserve it; it the bottle is kept corked and in a dark place, the solution will keep for a much longer time. I have also obtained satisfactory results in this respect from a Fehling's solution in which mannite was substituted for the tartrate of potassium and sodium. I have found that the pellets made in this country rapidly spoil.

In reference to the treatment, we largely agree. I am inclined to believe that certain sugars, and especially certain fruit sugars, are better managed by the diabetic than are others. Thus, I think that a patient may eat an apple, or even an orange, without much disadvantage, whereas the use of grapes is always attended with an increase in the quantity of sugar. The same is true of milk sugar. I am satisfied that milk is a good diet for most diabetics, although, of course, it is not a cure. The diatetic treatment is, for the most, efficient; but, so far as my experience with drugs goes, I am satisfied also that the preparations of opium, and especially codeine, are the most efficient adjuncts to the dietetic treatment. They are, however, open to the objection that they produce constipation, which almost always aggravates the other symptoms of diabetes.

Dr. J. W. Holland said the remarks of the previous speaker have reminded me of my experience with glycerine as an organic medium in Fehling's solution. This makes a solution which keeps for a considerable time, although not indefinitely. At the Jefferson College laboratory we employ two solutions of definite strength, one containing the sulphate of copper, and the other Rochelle salt and the caustic potash or soda. These are mixed in equal quantities when it is desired to employ the test.

In the use of Dr. Pavy's quantitative test, I find one small objection—which can be obviated by extreme care—that is, if the solution is boiled in an ordinary capsule the ammonia will be driven off and reoxidation of the copper follows. If a flask is employed the ammonia will not escape so rapidly.

One form of pellet lately brought to my attention is the indigo-carmine pellet. This seems to keep indefinitely. It is composed of sodium carbonate and the sulphindigotate of sodium. It is a very sensitive test—even more sensitive than the Fehling's solution.

Dr. Kleen, of Karlsbad, was introduced, and said: I had, two years ago, under my care at Karlsbad, a most singular case. Mm. X., of Gothenburg, fifty years old, then consulted me, telling me that she was suffering with diabetes, the illness had accidentally been discovered the year before, and that she had then visited Karlsbad (1884) and consulted Professor Seegen (who since that time has retired from practice).

Mm. X., when I saw her, presented no symptoms of diabetes or of any other illness, except some nervous debility. I gave her a considerable quantity (100 grammes) of cane sugar, collected the urine for some hours, and afterward for twenty-four hours, but found no glucose in it. I did not succeed better after she had dined copiously on rice and other amylaceous food. I then pronounced her free from diabetes. I still kept the case under observation, however, and at last found, upon examining the urine two hours after a meal, which had ended with a large portion of sweet fruits (mostly pears), a small quantity of reducing substance. Both Fehling's and Nylander's (bismuth) solution showed reactions corresponding to the one we got, with urine containing 0.1–0.2 per cent. of glucose. When testing the urine with polarization by the spectroscope, I found, to my utter surprise, a slight deviation *to the left.* The urine did not contain a trace of albumen. I was at a loss what to think of it, and submitted it to the test of fermentation. The same day, however, I received a letter from Professor Seegen, stating that when the patient was under his care, her urine had contained much larger quantities (as much as 3 per cent.) of reducing substance, and that he had found that substance to be *levulose.* At the same time Professor Seegen,

sent me a supply of glucose, asking me to submit the patient to a test of her toleration of that substance. So I did, and found that portions of 100 grammes or more did not produce more than very small quantities of reducing substance in the urine—that substance, to judge from a very slight deviation to the left in a good instrument, being levulose.

Worm-Müller has proved that glucose, administered in large doses, passes to a certain (small) portion unchanged into the urine, even in healthy persons, while it passes to a much larger proportion into the urine of the diabetic patient. He has also found that all the different species of sugar, administered in large doses, in a certain (small) proportion pass *unchanged* into the urine even of healthy persons, while in the diabetic patient at least some portion of them passes into the urine *transformed into glucose.* He believes in this latter circumstance to have found a difference, also, between persons suffering from real diabetes and those whose urine, while under ordinary diet with the common reagents, presents traces of glucose, or only now and then, under peculiar circumstances and in a passing manner, contains somewhat larger quantities of it.

This coincides with my own experience so far it hitherto goes. Like all physicians who occupy themselves with researches in this direction, I find every year persons whose urine shows traces of sugar, and now and then—especially after strong emotions, after alcoholic excesses, or after very rich meals of mixed food (but, generally, not after meals *exclusively* consisting of amylacea or of cane sugar)—in a passing manner, somewhat greater quantities of a substance which shows *all* the qualities of glucose. In these doubtful cases, I usually give a large quantity of cane sugar; afterward often find no glucose—or only slight traces of it—in the urine, till I have boiled it with mineral acid, and thus converted a portion of the cane sugar that has passed over into glucose, whereupon I will find the well-known reaction of glucose. I consider these cases to be distinct from true diabetes, though it seems to me highly probable that they indicate a tendency to that disease, which others of larger experience than myself have also noticed—for instance, Professor Frerichs.

In the present remarkable case of levulosuria, I found that some portion of cane sugar passed unchanged into the urine. It seemed to me to be of great interest to find out how Mm. X. reacted against the other species of sugar, especially against levulose, which, with some reason, could be expected to pass over in larger proportion than in quite normal persons. I therefore had the wish to administer a large amount of honey (which is a mixture of glucose and levulose), and also to make a test with milk sugar; but Mm. X., who had heard that she should avoid sugar above all things, who had an interest in her own case, only partly of the same nature as my own, did not wish to be submitted to further experiments, especially as I could not promise that they would be without some momentary influence on the urine. I can, therefore, only give the above description of the case, such as is already given by Professor Seegen, who first discovered it, but I am not without hope of being able in the future to give fuller information upon it.

I am decidedly of the opinion that the case is not, clinically speaking, strictly one of diabetes. If the substance had been glucose, it would have ranged among the large number of the above-named glucosurias, continuing unchanged for a great number of years in healthy or nearly healthy persons. I was rather astonished at seeing Professor Seegen state that the urine once contained as much as three per cent. of levulose, but cannot doubt the accuracy of this most excellent observer. That the quantity has diminished so very much without any dietetic treatment, makes the case even more interesting than it otherwise would be. I allowed Mm. X. a tolerably good supply of starchy food, advised her only to avoid excessive use of them, and I have lately heard that the urine only now and then contains small quantities of reducing substance.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, OCTOBER 8TH, 1887.

Editorial.

THE NEW RIVAL OF COCAINE.—That "truth is stranger than fiction" the experiences of daily life frequently affirm. We live and move in the midst of facts which, when once revealed to our senses and fully comprehended produce strange surprises and unexpected results. The majority of the readers of this article have doubtless often feasted on the tempting fruit of the honey-locust, which when fully tinged by the autumn frosts and still further shriveled up by the chilly blasts of early winter affords a flavor both luscious and appetising to many palates. Uninviting in its appearance and repelling with its prickly thorns the honey-locust tree would scarcely have been selected as one possessed of remarkable remedial virtues. Such, however, is the function it seems now to be possessed of.

Through the discovery of Mr. Goodman, a veterinary surgeon of Louisiana, it was ascertained by a mere accident that the leaves of the tree were possessed of analgesic and anæsthetic properties of a most marked character. Mr. Goodman submitted the leaves of the tree to Dr. A. M. Seward, who isolated an alkaloid, to which he gave the name of *stenocarpine*. Stenocarpine was then submitted to Dr. J. Herbert Claiborne, Jr., and to Dr. Knapp, both of New York, who carefully studied its physiological effects and communicated their results to the medical world. In an article in the *Medical Record* (October 1, 1887) Dr. Claiborne presents a very instructive account of the honey-locust tree from a botanical standpoint and then gives the results of his experiments with the active principle of the leaves employed as an analgesic and anæsthetic. Dr. Claiborne has ascertained that five or six drops of a two per cent. solution of stenocarpine instilled into the eye produced complete anæsthesia of the conjunctiva and cornea within five minutes and that anæsthesia lasted fully twenty minutes. He further observed that a one-fifth of one per cent. solution was sufficient to accomplish the same anæsthetic effect. The drug produces marked bleaching of the conjunctival vessels and complete dilatation of the pupil. It was found to possess the anæsthetic properties of cocaine and the mydriatic effect of atropine. Its use relieved the pain of iritis and the photophobia of trachomatous pannus and phlyctenulæ in the most brilliant way.

Its anæsthetic effect upon the mucous membrane of the nose was equally well-marked. Suffering with a severe attack of coryza, Dr. Claiborne painted the whole anterior nares on both sides with the solution. In ten minutes his breathing was free and all sensibility to touch in the nose was removed. "The entire organ felt deadened—not unlike the sensation produced by frost-bite."

Stenocarpine is more actively toxic than cocaine. Five drops were taken and repeated in an hour by Dr. Claiborne. Two hours and a half after the first dose had been taken his pulse had lowered eighteen beats. The heart recovered its normal beat and character in from four to six hours.

A slight sense of constriction in the soft palate and a sense of well-being and surface-glow were experienced. Drowsiness came on and lasted several hours, and left with a dry throat and husky voice which persisted two or three hours longer.

The effects of the drug upon the skin have not been fully proven. Dr. Claiborne asserts that it has an anæsthetizing effect on the unbroken, uninflamed cutis, whilst Dr. Knapp's observations fail to

confirm this opinion. It is just here that the properties of cocaine and stenocarpine seem to differ. Cocaine has no influence upon a cutaneous surface and should stenocarpine possess this latter property to the extent indicated by Dr. Claiborne its value to surgery becomes immense.

The mydriatic effect of stenocarpine, in association with its anæsthetic properties, makes its use in ophthalmology of even greater value than cocaine. Whilst the two drugs have a number of properties in common the differences in their physiological action favor a wider employment of local anæsthesia through their respective administration. It is probable that the discovery of stenocarpine will scarcely fall below that of cocaine itself in its beneficent results. A wider experience with the former agent is now needed to substantiate the full value of Mr. Goodman's discovery. Considering the wide distribution of the honey-locust tree and the abundance of its foliage, coupled with the remarkable strength of its alkaloid, the commercial status of the discovery is a most important one. Cocaine still remains too much of a luxury for universal use in surgical practice. A less expressive drug with properties of equal and substantially the same value is a great desideratum.

London Hospitals. — The *British Medical Journal* presents some interesting facts concerning the hospitals of London which seem to us to teach an instructive lesson. The population of London proper is 4,149,883 at the present time. Add to this the population of the outer ring of Greater London and the total population foots up 5,306,508. This population is larger than the combined population of Maryland, Virginia, West Virgina and North Carolina.. The hospitals of London are thus stated: The union infirmaries and the hospitals and as asylums under the Local Government Board are maintained at an annual cost of $2,679,330, which is raised by a general rate; 18,445 beds are this provided for, but a large portion are only used for infectious cases. There are three endowed hospitals with an aggregate number of 1,804 beds and an aggregate income of $699,960. There are 102 hospitals and medical institutions supported by voluntary contributions which have 8,540 beds and an annual expenditure of $2,613,340. The net results of these figures, stated in round numbers, is that there are provided in the metropolis for patients of the non-pauper class 10,000 beds, at an annual cost of $3,350,000. In 1886 the endowed and voluntary hospitals gave aid to 1,218,841 individuals. As the total pauper population of London is estimated at less than one hundred thousand, over a million applications were made to the hospitals in London during the year by persons who were not paupers. In other words according to the above statistics nearly one-fifth of the population of London received aid from the London hospitals during a single year. This statement seems to us to show an enormous imposition upon these institutions and to explain to some extent the general impecuniosity of many of the London hospitals now complained of, such for example as Guy's and St. Thomas's, which have been forced to close a large number of beds for want of money. When it is remembered that the financial support of 102 hospitals, with 8.540 beds, is borne by voluntary contributions the precarious condition of these institutions is well shown. It is stated upon the authority of Sir Rutherford Alcock that the income of fourteen of the principal hospitals in London from acquired property and annual subscriptions including the contributions from the Hospital Sunday and Hospital Saturday Funds, is $524,345, while the yearly expenditure is $1,100,345. The deficit of $576,000 is either made up by donations, legacies and by the proceeds of bazaars and other special efforts, or is not made up, and the hospitals get into debt, or live on their invested capital where there is any. We have no data to compare American institutions with the great metropolitan charities as above shown. We are quite sure, however, that our hospital population will not begin to compare with that of London in percentage and we are equally well satisfied that no such sums of money have been expended for hospital purposes.

BOOKS AND PAMPHLETS RECEIVED.

Insanity, Its Classification, Diagnosis and Treatment. A Manual for Students and Practitioners of Medicine. By E. C. Spitzka, M.D., President of N. Y. Neurological Society, Consulting Neurologist to North Eastern Dyspensary, etc., etc., New York. Pp. 423. E. B. Treat, Price $2.75.

Practical Surgery. By Wm. Johnson Walsham, F.R.C.S. Assistant Surgeon to St. Bartholmew's Hospital, etc., Philadelphia. P. Blakiston, Son & Co. Pp. 655. Price $3.00.

Hand-Book of Gynæcological Operations. By Alban H. G. Doran, F.R.C.S., etc. Phila. P. Blakiston, Son & Co. Pp. 485. Price $3.00.

Antiseptic Methods Applied to Obstetric Practice. By Dr. Paul Bar, Accoucheur to Maternity Hospital, Paris, etc. Translated by H. D. Fry, M.D. Phildelphia, P. Blackiston, Son & Co. Pp. 175. Price $1.75.

A Manual of Physical Diagnosis of Thoracic Diseases. By E. Darwin Hudson, Jr., A.M., M.D., Physician to Bellevue Hospital, etc. Pp. 162. Price $150. New York. Wm. Wood & Co.

Diseases of Female Mammary Glands. By Theo. Billroth, M.D., of Vienna, and New Growths of the Uterus, By A. Gusserow, M.D., of Berlin. Illustrated. Vol. IX of the Cyclopœdia of Obstetrics and Gynæcology. New York. Wm. Wood & Co.

Hand-Book of General and Operative Gynecology. By Dr. S. Hegar and Dr. R. Kaltenbach. Vol. VII of the Cyclopœdia of Obstetrics and Gynæcology. New York. Wm. Wood & Co.

Lessons in Gynecloogy. By Wm. Goodell, A.M., M.D., Prof. Clinical Gynecology in University of Pennsylvania. Third edition. Phila. D. G. Brinton.

Miscellany.

Operation for Procidentia Uteri.—Dr. A. Martin, of Berlin, was introduced to the Class of Jefferson College Hospital Philadelphia, by Prof. Parvin, on September 22d, and gave a demonstration of his operation for the treatment of procidentia uteri.

Procidentia uteri, he stated, is not to be satisfactorily treated by any operation which closes a large portion of the vagina only; the cicatricial tissue so formed will not endure; the operative treatment of this affection to be successful must include the uterus, the vagina, and the perineum. The patient presented for operation, a multipara, was suffering from retroflexion, subinvolution, and unilateral cervical laceration of the uterus with procidentia.

Dr. Martin described his plan of operation (as given in his book and that of Hegar and Kaltenbach) by diagrams upon a blackboard. He stated that he preferred catgut prepared in oil of juniper for suture material, and that he employed the continuous suture on the vagina and perineum, and the interrupted suture on the cervix uteri.

Proceeding to the operation Dr. Martin employed continuous irrigation with weak bichloride solution, stating that he was thus enabled to dispense with sponges; that the hemorrhage was insignificant, and that a cleanly and antiseptic operation was thus performed.

He first drew down the uterus, and amputated its cervix by wedge-shaped excision of the anterior and posterior lips, with subsequent interrupted suture. He then proceeded to operate upon the anterior vaginal wall, stating that for denudation in such operarions he preferred a knife which he had devised whose edge was so arranged as to cut in many directions. After denudation he introduced the continuous catgut suture from above downward, meeting no difficulty in coaptation until the lower portion of the denuded surface was reached, where it was necessary to introduce étage sutures. The suture was brought back to the point of origin, and the uterus replaced with a sound.

The posterior vaginal wall was then denuded, the operation being so performed as to utilize the firm tissues of this portion of the vagina as a support for the uterus. Beginning at the vaginal column, the left side of the denuded surface was first closed, and then the right by the continuous suture. The cicatricial tissue in the perineum was then exsected; a single strong suture placed at its upper extremity and the remainder closed by the continuous suture, étage stitches being employed whenever needed; the continuous suture was brought back to the point of commencement, completing the operation.

The result was a firm perineum, a vagina restored throughout its entire extent, and a uterus replaced and stimulated to involution by the excision of diseased cervical tissues.

The after-treatment advised was three weeks' rest in bed, the avoidance of movement of the bowels for four days, freedom from exercise for three months, and abstinence from sexual relations for eight or ten months. Ordinary precautions to secure cleanliness were to be observed. In the event of pyrexia, antipyretics were to be given. No local treatment or manipulation was desired.—*Medical News.*

Peat Moss as a Deodorizer.—Dr. D. M. Uspenski, in a preliminary note in the *Vrach*, describes a number of bacteriological and other observations he has made on a kind of peat moss belonging to the sphagni, which is indigenous in many parts of Russia and Siberia, and which is used with considerable success in the form of course powder for disinfecting cesspools and privies in Warsaw, Riga, and other towns. It is found that about four ounces sprinkled over an ordinary stool are sufficient to deodorize and dry it, so that the receptacle can be emptied and cleaned at proper intervals without any unpleasantness arising. This substance seems to have a wonderful power of absorbing moisture, for it was found by experiment that a pound of it which already contained 25 per cent. of water was capable of absorbing no less than seven pounds and a half more water. When added to fecal matter in the proportion of 10 per cent. by weight, it changes it into an almost dry mass of an earthly appearance, devoid of smell and easy to remove. A hundred pounds of the powdered moss will absorb 1438 litres of ammonia. The dry mass obtained by the action of the moss on feces, on being analyzed by Mr. Miltser, was found to contain from 2.38 to 2.66 per cent. of nitrogen, and from 0.96 to 1.15 per cent. of phosphoric acid, and, of course, formed a very valuable manure. The powder as received contained 2.39 per cent. of water and 5.38 per cent. of ash, and without any preliminary drying they absorbed fourteen times their own weight of water. Bacteriological experiments proved that the moss has a great capacity for diminishing microörganisms of various kinds. If this substance can be easily and cheaply obtained, it would appear to offer advantages over the dry earth we are accustomed to use, and in large towns would doubtless prove valuable.—*Lancet*, September 10, 1887.

A Hint to the Housewife.—At this season of the year, stewed apples, pears, and plums are favourite articles of diet. For breakfast or luncheon, in the dining-room or in the nursery, there are few table dishes more wholesome and more delicious than well-stewed fruit, served up with cream or custard. There are many persons, however, who cannot eat it, on account either of the acidity of the fruit or the excess of sugar necessary to make it palatable. Sugar does not, of course, counteract acidity; it only disguises it, and its use in large quantities is calculated to retard digestion. The housewife may, therefore, be grateful for the reminder that a pinch—a very small pinch—of carbonate of soda, sprinkled over the fruit previous to cooking, will save sugar, and will render the dish at once more palatable and more wholesome.—*British Medical Journal.*

Diagnosis of Beginning Carcinoma of the Cervix.—Since experience has shown that beginning carcinoma of the cervix can be entirely cured by operation, it is important that family physicians send the patients to the specialists early. And in order to make at least a probable diagnosis without microscopic examination of an excised piece, C. H. Stratz says that from his observation and that of others the important signs of carcinoma are as follows:

1. The diseased place is sharply limited by sound tissue, and never goes over into it by degress.

2. A difference in the level of the whole diseased portion can always be made out.

3. Carcinomatous portions have always a light yellow color.

4. The malignant deposits is usually shown as finely granular, withish-yellow glistening elevations, at least in individual places.—*Centralbl. für Chirurgie*, No. 25, 1887.—*Jour. Amer. Med. Asso.*

Adulteration of Russian Tea.—So much has been heard about the wonderful excellence of Russian tea and its great superiority to the article which is retailed in England, that it is rather surprising to read in the *Peterburgskia Vedomosti* that a large number of analyses made in the Sanitary (Analytical) Station of the St. Petersburg Vratchebnaia Obshtchina led to the conclusion that adulteration of tea has attained enormous dimensions in the northern capital of Russia. Some specimens, sold at the price of 1 rouble and 20 kopecks (about 2s. 6d.), contained only 15 or 20 per cent. of genuine leaves, the remaining 85 or 80 per cent. consisting of various mixtures, including such an injurious substance as the leaves and flowers of *Epilobium angustifolium*, or the French willow-herb (Russ. *Kaporskytchai* or *Ivantchai*).—*Brit. Med. Jl.*

The Percentage of Sterility among Men.—Kehrer, of Heidelberg, has examined 96 men, as follows Impotent, 3; having semen containing dead spermatozoa, 29; deficient spermatozoa, 11; excessive spermatic secretion, 53. The percentage of sterility is thus 33.32.—*Wiener Presse*, July 10, 1887.—*Med. News.*

The Obstetrical Advantage of Otter Tail County, Minnesota.—Otter Tail, one of the frontier counties of Minnesota, bids fair to rival the Rotunda Hospital or the Allgemeine Kranhaus of Vienna as a resort for aspirants for obstetrical advantages and greatness. Dr. T. G. Hutton, of Fergus Falls, writes us that there are now in that county quadruplets one week old, living triplets eight months old, living twins born of a sixteen-year old mother, and a child twelve months old whose mother is now only fourteen and one-half years old. It may be added for those who may hesitate between Vienna and Otter Tail County, that the latter place is just as accessible as Vienna, and the cost of living is less. The only reasonable objection to the frontier county is that the vernacular is English; nevertheless, it contains, we believe, a large number of Germans.—*Jour. Amer. Med. Assoc.*, Sept., 3, 1887.

How they Deal with Bone-Setters in France.—The Académie de Médecine summoned M. Gilmant, a bone-setter at Aubervilliers, for illegal practice as a medical man. M. Gilmant and his wife have imposed upon the credulity and ignorance of many of the peasant classes at Aubervilliers for some time past. The Eight Chambre Correctionelle condemned M. Gilmant to three months' imprisonment, and Madame Gilmant to fifteen days' imprisonment.—*Brit. Med. Jour.*

The Local Treatment of the Bladder.—Ulzmann (*Centralblatt für Chirurgie*, No. 30, 1887) says: All acute bladder troubles must be excluded from local treatment which is only applicable to the chronic, dietetic and therapeutic measures. In chronic affections we must discover whether the disease is a primary and isolated one, or whether the urethra or the prostatic portion is involved.

The latter is the case, for example, in young men who in consequence of a gonorrhœa have begun to suffer from an extension of the disease, and treatment of the neck of the bladder must be carried out.

A thin catheter is passed into the bladder and then withdrawn about three centimetres so that the point rests in the neck. A tepid medicated solution is thrown in gently (about 200 grams). If no fluid flows back it shows that the end of the catheter is in the right place, the opening being closed by the bladder neck.

After thoroughly injecting the bladder the catheter is withdrawn and the patient empties the bladder himself, and in this way the fluid passes again over the diseased parts.

If, on the other hand, the bladder itself is affected the author does not recommend the double catheter because

by this method the bladder remains contracted and only a small portion of its mucous membrane comes in contact with the medicated solution employed. He prefers injecting the fluid by means of a hand syringe through a soft catheter.

By the use of the irrigator too great a quantity of solution is permitted to enter which might dilate the bladder, already often in a paretic state, to too great a degree. Only in the rare cases of contracted bladder in young persons is the irrigator to be recommended.

It is further to be looked to that after the injection the bladder is wholly emptied.

For washing out the bladder lukewarm water must be used, medicated with tincture of opium, cocaine ¼ per cent., resorcin ½ per cent., or carbolic acid ⅛ per cent. in case of sensitive bladder; permanganate of potassium $\frac{1}{10}$ per cent. or nitric of amyl three drops to half a pint of water in case of amoniacal urine; $\frac{1}{10}$ per cent. salicylic acid in phosphaturia, etc.

A 1 to 10,000 corrosive sublimate solution may be used when bacteria are present.

For hæmorrhage $\frac{1}{10}$ to ½ per cent. nitrate of silver solution in cold water, or fifty to sixty drops of the sesquichloride of iron to the quart of water.—*Journal Cutaneous and Genito-Urinary Diseases.*

The Intrauterine Stem in the Treatment of Flexures.—Dr. A. Reeves Jackson, of Chicago, read a paper on the above subject before the American Gynæcological Society. He confined his remarks to a limited class of cases. Many forms of flexion require treament, others are not improved, and still others are only made worse. He had not been satisfied with the results of incision and dilation. He had used the stem for many years without bad results. Dysmenorrhœa is the main indication for treatment, sterility being a secondary consideration. His method of treatment is first to dilate by means of graduated bougies, then after a menstrual period he inserts a soft rubber stem, and keeps it in position by means of glycerine tampons. After six weeks a large stem is used. As soon as the uterus becomes straightened, a permanent stem of vulcanized rubber is introduced, Chamber's bifurcated stem being especially useful. Recently he had employed one which did not separate at the end. This hard stem is worn for three months, and is then removed. The patient is examined in the course of a few weeks, and if the uterus remains in position it is removed. The success of the treatment lies in its *gradual* character.

The use of the stem had been severely condemned, but clinical experience showed its value. The speaker had seen great benefit, dysmenorrhœa and sterility being both removed. Many hold that pelvic inflammation is the main cause of pain in flexions, but the reader did not believe in the doctrine of such frequent inflammation. The stem when carefully used is no more dangerous than an intrauterine application. He had never seen any inflammation follow the use of the stem in his hands. The great trouble is that men try to straighten the organ too rapidly and forcibly, and without reference to the existence of subacute inflammation. He never uses a stem unless there is dysmenorrhœa; when the flexion is due to a fibroid or to pelvic inflammation, it should not be used. Out of sixty-seven cases treated with the stem, forty-one were cured. The conditions necessary for success are watchfulness, patience, and slow progress.

The Operative Treatment of Prostatic Hypertropy.—A remarkable case is recorded by Landerer, in the *Centralblatt für Chir.*, p. 292, 1887, in which being unable to crush a small stone owing to prostatic hypertrophy he performed the median operation and extracted two small calculi. During the operation, however, he accidently removed a small portion of the prostate. The pateint made an excellent and rapid recovery and could pass his water subsequently in a good full stream, whereas before he had great difficulty in voiding it. This condition remained

permanent fifteen months later. A suggestion is made to perform this operation for the relief of enlarged prostate, but the operator has not yet met with a suitable case.—*The Practitioner.*

Medical Items.

The medical schools of this city have opened with unusually large classes of students.

Drs. N. R. Gorter, W. F. Lockwood and R. T. Wilson, of this city, have returned from a summer visit to Europe.

The Winter session began at the College of Physicians and Surgeons on Monday. Prof. Simon delivered the opening address.

The Winter session began at the University of Maryland on October 3rd. The opening lecture was delivered by Professor R. Dorsey Coale.

The Woman's Medical College opened its doors to students on Wednesday, October 5th. Dr. J. T. Smith delivered the opening address.

The Clinical Society of Maryland resumed its regular Winter session on Friday evening of the present week. Officers were elected for the ensuing for year.

The *Paris Médical* of July 23rd reports a case of ulcer of the tongue cured by a continuous galvanic current. The treatment required 190 *séances*, and lasted eighteen months.

The Pennsylvania Hospital has recently purchased about 520 acres about twelve miles from Philadelphia upon which it is proposed to place the Insane department of the institution.

The regular winter session of the Baltimore Medical College opened on October 3rd. An address was delivered to the students by Dr. C. W. Chancellor on "Recent Theories in Sanitation."

We again remind our Virginia readers of the fact that the Virginia State Medical Society will holds its annual session in Richmond beginning on October 18th. The meeting promises to be a most interesting one.

The death of Mr. Richard Quain, the distinguished anatomist, has given rise to strange misapprehensions. Dr. Richard Quain far better known in general society, and still we are glad to say in good health and in active pursuit of his professional duties, has naturally been confounded with his deceased cousin. —*Brit. Med. Jour.*

The city of Paris has purchased 12,000 mètres of ground in the Rue de Bagnolet, a hundred yards distant from the fortifications, for the construction of a new hospital, for the sum of 350,000 francs (£14,000). Eight thousand mètres of this ground is park land. The buildings are to cover an extent of 3,000 square mètres. This hospital is destined for the reception of blind children.

The report having been circulated that only domestic wines were furnished on the occasion of the dinner given in the Pension Building during the recent session of the International Medical Congress, the idea being that cheap wines were used on the score of economy, Dr. Garnett, chairman of the Committee of Arrangements, denies the report and furnishes a certificate to prove that the "grand sec" Jules Mumm & Co., was served and that it was pronounced extra fine in quality and flavor by both foreign and American members.

In the Section on Therapeutics and Materia Medica, Dr. John E. Brackett read a paper on "Rhamnus Pursianus." This plant belongs to the Rhammaceæ and is indigenous and peculiar to the Pacific slope of this country. The herb is larger than other varies of rhamnus. It belongs to the tonic astringent and resinbearing class of cathartic agents. In small does it has a tonic and astringent effect owing to its contained tannic acid. Given in purgative doses, the effects closely resemble those of rhubarb. It is most useful in treating chronic constipation. It should be given for months, regulating the dose according to necessity. Proper attention must also be given to remove any cause for the constipation which may be present. Various solid preparations were described, none of the preparations being officinal. The dose of fluid extract (best preparation) as a laxative is gttt. v-xv, or as a purgative is gtts. xv-xx. In one case of constipation with bleeding hemorrhoids one minim given every hour was sufficient to entirely relieve the condition.

At a recent meeting of the Société Médicale des Hôpitaux, M. Fééol read an account by M. Devalz, of Eaux-Bonnes, of an epidemic of typhoid fever, in which the author discovered an instance of the transmission of the morbid germ by the air. A patient, presenting the first symptoms of typhoid fever, arrived at an hotel at Eaux-Bonnes. She recovered in four weeks, but the three daughters of the hotel-keeper were successively attacked with the malady. There was no other case of typhoid fever in the town, which is plentifully supplied with pure spring water. Bacteriological examination showed this water to be free from suspicious organisms. During the treatment of the first patient no disinfecting measures had been taken: fæcal matters were emptied into the water closets of the hotel; the door of the closets opened on to an ill ventilated passage, in which the daughters of the hotel-keeper slept. Their room, which contained only one door and window, both opening on to the passage, was at only a yard's distance from the closets—*Brit. Med. Jour.*

Original Articles.

PRACTICAL NOTES ON URINARY ANALYSIS.

BY WILLIAM B. CANFIELD, A.M., M.D.,

Chief of Throat and Chest Clinic and Lecturer on Normal Histology, University of Maryland.

The importance of a knowledge of the study of urinary analysis need not be pointed out here. It is generally admitted that in every case of doubtful diagnosis the urine should be examined. The science, (if it may be socalled) of urinary analysis has been, however, carried to such a refinement that an expert chemist alone is able to master it in all its detail. The busy practitioner has no time to search through manuals and make elaborate tests. In the light of many advances made in this department several old tests have shown themselves trustworthy and many new ones have been added. The object of these notes will be, after reviewing the general character of the urine, to endeavor to show the tried and reliable tests for detecting normal and abnormal substances in the urine, and at the same time to try to point out the little errors that may creep in in such an undertaking, and to guard against certain mistakes by clearly stating the important and carefully avoiding the superfluous. Besides drawing largely from his own experience, the writer has unhesitatingly made use of the literature of the subject.

GENERAL CHARACTER OF THE URINE.—

1. *Quantity.*

The amount of urine passed in health during twenty-four hours by a man is about forty to fifty fluid ounces, and by a woman slightly less. This amount may be temporarily *increased* in health

a. By drinking larger quantities of liquid.

b. By diminished skin activity, as in cold or damp weather.

c. By taking diuretics.

This amount may be *diminished*

a. By drinking little liquid.

b. By rest.

c. By profuse perspiration.

The most urine is passed in the afternoon and the least at night. Pathlogically the amount is *increased*

a. In diabetes mellitus and insipidus.

b. In granular atrophy of the kidney.

c. In pyelitis.

d. By the absorption of dropsical fluids from the body.

Pathologically the amount is *diminished.*

a. In fever.

b. In the acute and chronic forms of parenchymatous nephritis.

c. In cholera.

d. In the formation of dropsical fluids.

e. In those heart troubles where the blood pressure is diminished.

2. *Color.*

Normal urine may vary in color from a pale yellow to a brownish black according to its concentration. The color of the urine is a very important factor in the diagnosis at the bedside. A light clear urine (*urina spastica*) would show absence of acute fever and a possible presence of polyuria; while a dark colored urine would denote not only a fever, but might signify a variety of affections of the spleen or liver, a hearty meal, active exercise, etc. Reddish or reddish-brown urine would point to blood, black urine to the presence of the pigment of melanotic cancer (melanuria). Green or brownish-green urine would indicate bile.

Different drugs have a decided effect on the color of the urine; for example, rhubarb (chrysophanic acid), senna and santonin make it intensely yellow or a greenish or brownish yellow. Further logwood, strong coffee, turpentine, carbolic acid, tar, creasote fol. uvæ ursi, kairin and fuchsin all color the urine. It is not probable that the presence of albumen can be suspected by the color.

3. *Smell.*

The smell of urine may best be described by saying that it is urinous. When concentrated it is strong, when ammoniacally decomposed it is still stronger and even putrescent. It is af-

fected by certain drugs. Turpentine gives it the odor of violets. The odor of cubebs, copaiba, sandalwood, costoreum, valerian is imparted to urine after administration by the mouth. Also after eating certain vegetables, such as garlic, asparagus, cauliflower, etc., the urine has a peculiar smell. In diabetes mellitus it may have a sweet smell.

4. *Transparency and Consistency.*

Normal urine is always clear when first passed and shows on standing a slight cloudiness (nubecula) more noticeable in the urine of women. Microscopically a few epithelial and other cells are always present and in the case of females, vaginal epithelium. Pathologically the presence of the earthy phosphates of lime and magnesium, of the urates, pus, mucus, blood, etc., causes cloudy urine. Normally urine is aqueous. Pathologically the presence of mucus or pus may cause it to be viscid and also chyle in the urine (chyluria), as observed in the tropics gives it a turbid and thick appearance. The foam which normally so quickly disappears from urine may remain in the presence of sugar, albumen, or blood.

5. *Reaction.*

The reaction of normal urine is generally acid. The cause of this is not certain although it is very likely due to the presence of the acid phosphate of sodium (N_a, H_2, PO_4,) and other salt. The reaction is tested by means of litmus paper. Acid urine turns blue litimus paper red and alkaline urine turns red litmus paper blue. Normally the urine may be alkaline immediately after meals. The acidity is greater

a. In concentrated urine after perspiration.

b. After fasting.

c. After eating much animal food.

d. After exercise.

e. In fever.

The urine is only faintly acid or even alkaline

a. Just after meals.

b. When very dilute.

c. After taking certain mineral waters and other alkalines.

d. After repeated vomiting.

Pathologically the urine is alkaline in cystitis and by decomposition after it has left the bladder.

The alkalinity may be due to a fixed (potassium or sodium) or a volatile (ammonia) alkali. In the former case the litmus paper made blue by the alkali remains blue on drying; in the latter case the blue fades away.

6. *Specific Gravity.*

In taking the specific gravity of urine the proportion between its watery and solid constituents is measured. The specific gravity is measured by means of a urinometer, which consists of a glass tube loaded at its lower end with mercury and with a bulb blown in the middle. Tke stem, the external diameter of which is as regular as possible, is hollow and the scale is marked upon it. A urinometer when immersed in pure distilled water at a temperature of 60° F. should register at 1000. The specific gravity of urine thus measured is normally between 1015 and 1021 for 40 to 50 ounces per day, and pathologically may vary from 1002 to 1040 and even more. Normally the specific gravity is in inverse proportion to the amount passed in twenty four hours.

In order to take the specific gravity of a given specimen of urine, a large test tube or cylinder should be about ¾ filled with urine and after the bubbles have disappeared or have been removed by bibulous paper, and the urine cooled off to the surrounding temperature, the dry urinometer should be gently dipped into the urine and allowed to float without touching the sides of the vessel, and after all motion has ceased the figures may be read off from the stem of the urinometer. In taking the specific gravity the total amount passed in 24 hours should be known. Normally when the amount of urine is temporarily increased in health the specific gravity is less and *vice versa.* Pathologically the specific gravity is high and the amount of urine passed low

a. In acute febrile diseases.
b. In some form of heart trouble.

In diabetes mellitus the specific gravity is generally high and the amount passed abundant and clear. Exceptionally cases of diabetes mellitus have been reported with abundant urine and low specific gravity. Generally a low specific gravity with abundant secretion of urine is observed in many constitutional afebrile diseases, such as

a. Chlorosis.
b. Hysteria.
c. Contracted kidney.
d. Diabetes insipidus.

(*To be continued.*)

PRACTICAL NOTES ON THE TREATMENT OF SKIN DISEASES.

BY GEORGE H. ROHÉ, M.D.,

Professor of Dermatology and Hygiene, in the College of Physicians and Surgeons.

(*Continued from issue of October* 1.)

HYPERTRICHOSIS.—*Hypertrophy of Hair.*

Hypertrichosis is an abnormal condition manifested by excessive growth, abnormal distribution, or heterochronism in development of hair. It may be hereditary or acquired. In some cases the hirsuteness is general, covering more or less the entire surface of the body, in others it is limited to certain circumscribed areas.

The cases of generalised hirsuties, like those of the hairy family of Burmah, the Russian dog-faced people, Julia Pastrana and her child, and "Krao" are generally hereditary. In the Burmese family the hirsuteness is known to have persisted through three generations while in the other instances mentioned two generations are known to have been hairy.

In the minor degrees of hypertrichosis, such as ordinarily come under the notice of the physician, the hereditary tendency is also marked in the greater number of cases. For example, a moustache and beard not infrequently "decorate" the female members of a family through several generations. In males this is often strikingly manifested in the hairiness of chest and limbs.

Hypertrichosis may also be acquired by those not hereditarily predisposed. There seems to be some connection, although it has never been satisfactorily explained, between disorder of the genital function and overgrowth of hair on the face in women. The facts on record bearing upon this problem are, however, too few and too indefinite to permit satisfactory conclusions to be drawn.

It has been observed that insane women frequently develope hypertrichosis of the face, and some writers have concluded that the aberration of mental activity bears relation to the hirsuties, but there are reasons to believe that in some of these cases the hypertrichosis existed before the mental disturbance became apparent. Most women are exceedingly sensitive upon the point of their personal appearance, and as a growth of hair upon the face is considered an attribute of masculinity the hairs are assiduously plucked out, or removed at frequent intervals with chemical depilatories. When mental alienation has become established less attention is paid to personal appearance and the hairs are permitted to grow at will. It is not improbable, likewise, that the very presence of the hairy growth in a sensitive woman may be an exciting cause of insanity. It is at all events a matter of common observation that most women with pronounced beards or moustaches are predisposed to melancholia.

Certain neurotic and irritative conditions may cause over-development of hair. Possibly the hypertrichosis of insane women may be looked upon as a manifestation of the neurotic form. Others are seen in some cases of hairy nævi, where the pigmentary overgrowths evidently occupy the area of distribution of certain cutaneous nerves. The patch of hair over the spinal defect in spina bifida may also be considered a form of neurotic hypertrichosis.

Surgeons not infrequently observe an overgrowth of hair in the vicinity of wounds or ulcers, especially if irritating

applications have been used. Thus, I have seen a pretty free growth of long dark hair upon a limb dressed daily for a long time with carbolised oil. The hairs usually fall out, however, after the irritation ceases, if the growth is in an abnormal situation.

A curious relation has been observed to exist between the development of the hair and the teeth. In nearly all the cases of universal hypertrichosis hitherto recorded, the teeth were defective. A striking exception was the case of Julia Pastrana, who in addition to marked hirsuties, had a double set of teeth in each jaw. A remarkable contradiction to the rule in cases of hairy human beings, is the observation of Darwin that hairless dogs have defective teeth.

Unna believes that hirsuties is an example of arrested development. At first thought this sounds like a paradox, but the theory is a very plausible one, although I do not think it accounts for all the facts. It is known to embryologists that the fœtus during intra-uterine life becomes thickly covered with hair, which usually falls out before birth and which is often discovered in the liquor amnii. Sometimes, however, this ante-natal lanugo hair remains until the child is several weeks old. According to Unna, the post-natal normal hair-growth is of a totally different type from the ante-natal lanugo. In hypertrichosis, however, the normal chage of type does not take place and the pre-natal type of growth continues. Hence, hypertrichosis may be looked upon as an arrest of development, in which the evolution from the fœtal to the post-natal type of growth has not occurred.

I have elsewhere* given my reasons for not accepting this theory of the distinguished German dermatologist.

The practical ingenuity of an American physician has given to the profession a means of permanently removing abnormal development of hair. In 1875 Dr. C. E. Michel, a prominent ophthalmologist of St. Louis, described a method of permanently removing ingrowing eyelashes by means of the electrolytic current. Dr. Hardaway, of the same city, tried the method in hypertrichosis, and was able a few years after to report entire success in removing the hairy overgrowth. During the last eight or nine years the method has been largely employed, and always, in competent hands, with entire success. I have used it very extensively since 1882, with the greatest satisfaction. The verdict of all qualified observers to-day is that the electrolytic destruction of superfluous hair is no longer in the experimental stage, but a recognized operation, and when properly performed fulfilling all the claims made by its advocates.

For removing hair by electrolysis the following qualifications, instruments and appliances are necessary:

1. A plentiful stock of patience.
2. A steady hand.
3. Good eyesight.
4. A suitable battery.
5. Proper electrodes.
6. A pair of cilia forceps.
7. A chair with head-rest.

Without the first three natural qualifications mentioned no one should undertake the treatment of a case of hypertrichosis by electrolysis. Defective eyesight may be aided by suitable glasses, but no substitutes can be found for the other two, and a lack of them disqualifies one from properly performing the operation.

A suitable battery is any one that will furnish an even, constant current of low quantity and high tension. The Flemming or McIntosh batteries (zinc-carbon elements), the Barrett chloride of silver battery, or the Siemens-Halske modification of the Daniell cell will answer. I have used all of these except the Barrett battery.* With the latter I have had no experience but it seems to be an excellent instrument for the purpose on account of its easy portability. My favorite battery for electrolysis is the Siemens-Halske. It furnishes a perfectly constant, even current, is easily managed, and does not get out of order. I have had one in almost daily use for nearly two years with no further attention than supplying the water lost by evaporation. The only objection to this

Studies in Hirsuties. Transactions of the Ninth International Medical Congress.

battery is that it is not portable, and can therefore only be used at one's office. Of this battery, I use from six to fifteen cells, according to the sensitiveness of the skin, or condition of the battery, always beginning with the smaller number and increasing the strength of current if necessary. If the battery has a rheostat, this can be used for regulating the intensity ot the current.

When one of the zinc-carbon batteries is used, from four to six cells furnish a sufficiently strong current while the fluid is fresh. After a time the number of cells may be increased as necessary.

A milliampèremeter is an expensive and sometimes useful addition to the battery, but is by no means necessary.

It should be remembered that the battery needed is one that furnishes *a constant current.* A *faradic battery will not answer for electrolysis.*

The ordinary sponge-covered disk will answer for the positive electrode. For the negative a needle-holder and fine needle are necessary.

The holder shown in the cut was devised by Dr. Hardaway and is made by the A. M. Leslie Company, of St. Louis. It is very convenient. A fine steel sewing needle, (No. 12) may be used, but flexible needles made of an alloy of platinum and iridium are preferable. They are thinner than the finest steel needles, never break and can be bent into any shape desired.*

The forceps should have an easy spring, with flat lightly serrated jaws and should not have a catch.

A chair with a firm head-rest must be used. I use an ordinary cane-seat arm chair with adjustable head-rest, and find that it answers the purpose as well as a more complicated or expensive oculists' or dentists' chair.

The steps of the operation are as follows.

The patient is placed before a good light—avoiding direct sunlight unless modified by frosted glass—and directed to take hold of the handle of the sponge electrode, the sponge, of course, having been previously moistened. The operator then sits a little in front of and to the right of the patient, and takes the needle electrode in his right hand, holding a pair of tweezers with flat, narrow jaws in his left. The needle is then gently insinuated into a follicle by the side of the hair until the bottom of the follicle is reached. This is manifested by a slight resistance to the onward passage of the needle. The patient is then directed to touch the sponge with the other hand, thus closing the circuit. The current will immediately pass and the electrolytic action be made manifest by a little frothing around the needle. In some skins also a little wheal will be raised about the follicle. In from twenty to forty seconds the hair can be extracted with the tweezers without the slightest resistance or pain. If the hair does not come away with perfect ease, the papilla has not been destroyed, and the needle should be permitted to remain and the current to pass a little longer. The current is broken by removing the hand from the sponge electrode. This gives less pain than if the current is closed and opened with the needle.

If the hairs are very close together, they should not all be removed at the same time. The hairs should be picked out here and there; otherwise the points of irritation will be in too close proximity, and, if sufficiently intense, may produce small areas of sloughing and leave scars. If the operation is properly performed, no visible scars should remain.

A sitting may last from fifteen to thirty minutes. Very few operators can extend it beyond the latter time. The sittings may be repeated every other day, or, in cases where time is important, every day.

After the operation a mild astringent lotion may be applied, and the patient

*The needles are also manufactured by the A. M. Leslie Company, of St. Louis.

should be directed to bathe the surface operated upon several times a day, with hot water for five or ten minutes at a time. This tends to reduce any hyperæmia which may have been caused by the operation.

When the hair papilla has been thoroughly destroyed the hair cannot be regenerated. In most cases however, a number of the hairs return, showing that the destruction of the papillæ has not been complete. This happens in from five to twenty-five per cent. of the hairs removed, and depends partly upon the skill of the operator and partly upon the direction of the hairs. In some cases the hair shaft in the skin is so twisted that it is almost impossible to strike the papilla. Such hairs often require repeated removal before they are finally destroyed. The greatest success will usually be obtained on the upper lip and chin, while the hairs under the jaw will frequently return again and again to the great disappointment of both patient and physician. Partial failure should not discourage the operator. Persistence will surely be rewarded by success.

I may add that the older the growth of hair the more satisfactory will be the result. In young persons, new hairs continually appear which sometimes lead the patient to think that the operation is unsuccessful and that all the hairs are returning. The fact of the continued growth of the hair should be explained to the patient before beginning the operation. In older persons where the growth is complete, the new crop consists simply of those hairs which had not been destroyed and which grow out again. A second removal is followed by still fewer returns, and finally complete success is obtained. In younger individuals this period is longer deferred on account of the above mentioned outgrowth of new hairs.

Where electrolysis cannot be used, the hairs may be removed by chemical depilatories. Among those recommended in the books the following are least likely to produce irritation of the skin. They should not be advised, however, unless circumstances demand a rapid removal of the hair. Their use is often followed by dermatitis or eczema.

McCall Anderson recommends this formula:

℞ Barii sulphidi, 3 iss.
Zinci oxidi, 3 vi.
Coccinellini, gr. i. M.

When used this is mixed with water to make a paste, which is applied thickly over the surface from which the hair is to be removed. In three or four minutes it is scraped off with a spatula and the part washed with hot water, and a dusting powder of starch or oxide of zinc applied. Another compound, recommended by Kaposi is,

℞ Arsenici sulphidi flavæ, 3 ss.
Calcis vivæ, ℥ss.
Farinæ tritici, ʒii. M.

This is used in the same way as the above.

Bœttger's depilatory is least hurtful to the skin of all those mentioned. It may be used in this combination.

℞ Calcii hydrosulphureti, ℥ii.
Glyceriti amyli,
Pulv. amyli, āā 3 i.
Ol neroli, gtt. i. M.

This is applied in a thick layer, and washed off in ten to fifteen minutes with warm water. Afterward a dusting powder should be applied.

Unfortunately depilatories are only palliatives as the hair always returns, frequently with more vigorous growth. Hence they must be used constantly (every week or two) in order to keep the deformity out of sight.

(To be continued.)

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

SPECIAL MEETING, SEPTEMBER 19, 1887.

The PRESIDENT, J. SOLIS-COHEN, M.D., in the chair.

Mr. Lennox Browne, F.R.C.S., of London read a paper on.

AN UNRECOGNIZED CAUSE OF MANY THROAT AILMENTS.

In accepting the very flattering invitation of your President to speak a few words to the members of the Philadelphia County Medical Society, it appeared to me both more becoming and more profitable to offer you some practical remarks explaining the *rationale* of some of the commoner of throat ailments, than to attempt to magnify the office of the laryngoscope by the relation of rare and wonderful cases. I was the more inclined to this view because I was well aware that, through the assiduous industry and well-known skill of your President and other members of your Society, you have for some years been kept thoroughly posted in all that is new in laryngology.

It is now some ten years since first I sought an objective explanation of the condition known as *globus hystericus*, and since I commenced to make a systematic examination with the laryngoscope of every patient who came to me with this symptom. The result was communicated in a paper to the Congress of Laryngologists held at Milan in 1880. I found that but very few cases indeed are of a hysterical character—that is, of the nature of a phantom sensation—though uterine or ovarian disorder is a not infrequent predisponent or, at least, concomitant of the throat condition in the female sex.

Extending the term *globus hystericus*, I find that, with hardly an exception, all and every subjective sensation in the throat is symptomatic of an objective cause. The chief of such feelings are those of a heat, a prickling, a swelling, a weight, a straw, a hair, or other foreign body. A few patients—one especially, a hale farmer—have complained of a feeling of intense cold, which is sometimes relieved, sometimes aggravated, after food-taking. In some instances there is actual pain with spasm, cramp, and a sensation of choking, and not infrequently there is cough; this symptom varies in degree from a slight hacking, to the loud hyena-like bark known as nervous laryngeal cough. Many of the cases of so-called laryngeal vertigo, or, as I prefer to call it, of laryngeal epileptiform seizures, are capable of explanation and cure, on the lines I am at present taking.

On examination of the throat of a patient with symptoms such as I have described, one may or may not see chronic congestion and relaxation of the fauces and uvula, enlargement of the tonsils or obstruction by caseated material of the orifices of the crypts, granular pharyngitis, or even laryngeal hyperæmia. Where any one of these conditions is present, treatment thereof may or may not give relief; but none of them represents the class to which I would draw your attention, namely, that in which there is no generally recognized morbid state of local significance.

The results of laryngoscopic investigations in my hands have shown that there is:

1. A varicose, and even truly hemorrhoidal, condition of the veins at the base of the dorsum of the tongue, sometimes at the under surface and sides, in which last case it may be symptomatic of mitral insufficiency, or of severe hepatic derangement, or even of cerebral lesion. There is often a similar varicose state of the vessels in the superior surface of the epiglottis.

2. An enlargement of the circumvallate papillæ at the back of the tongue, causing the epiglottis to be hindred in its movements — imprisoned as your President first called it.

Just drawing attention to the fact that the structure of these glands is very similar to that of the tonsils, I may mention that in a few instances I have seen actual blocking of the orifices, similar to the condition known generally as chronic follicular tonsillitis.

I may also note that it is not possible to see these things either with a tongue depressor or in the laryngeal mirror as ordinarily employed. Many observers, especially beginners, seem to consider that their sole aim is to see the vocal cords, and, if these are sound, they write down, "larynx normal;" but they omit to look well to the frame-work. To see

this condition of lingual varix and glandular hypertrophy, the mirror must be placed quite high up in the throat.

Where, as is often the case, there is no actual or noticeable enlargement of the thyroid gland, it will be observed, on passing the hand gently over the front of the throat, that there is a distinct fulness of the thyroid isthmus. If the least pressure be made at this situation, the patient—not necessarily a female—will complain that the abnormal sensation is at once excited, and, on being questioned, will admit that when it occurs the collar is felt to be too tight for the neck.

Inquiring into the general health, and happily failing to find any of the more serious lesions to which I have alluded, it will be noted that habitual constipation and a generally defective circulation are both frequent symptoms; while in others there will be concomitant evidences of a varicose diathesis, as rectal hemorrhoids, varicocele, or varicose veins of the extremities.

In females the menstrual flow is often morbidly frequent or excessive, and there are other evidences of an enfeebled vaso-motor control. Abuse of alcohol and tobacco are excitants of the condition; and in the cases of singers and public speakers, defective methods of filling the lungs—forcing the lower register upward, or other functional fault which may lead to undue strain on the palato-laryngeal muscles and engorgement of the vessels in this region—are fruitful predisponents.

In this connection, I may refer to the accurate explanation offered by your fellow-citizen, Dr. Carl Seiler, of the etiology and pathology of chronic pharyngitis when occurring to voice users.

Some of those obscure cases which come under our occasional notice, of the presence of small quantities of blood in the mouth, or of the taste thereof on rising from sleep, will be explained by the leakage of one or other of these enlarged and hemorrhoidal venous capillaries in the region now under consideration.

A few words as to treatment. If the case is not of long standing or of aggravated character, correction of the main constitutional cause—cessation of the faulty method of voice production, or prohibition of a vicious habit or indulgence—may be sufficient to effect a cure, but this is rarely the case. Of remedies, I give chalybeates and aperients with digitalis or ergot, as may be indicated. Locally, astringent applications, especially of chloride of zinc or perchloride of iron, are by no means without avail; they can be applied by the patient himself. Gargles as ordinarily employed are useless, and occasionally are productive of exacerbation of the symptoms. Not so if employed by the method known as that of Von Troeltsch. Of lozenges, I find those of muriate of ammonia much more active in leading to resolution of the venous congestion, than those of red gum, rhatany, etc.

Recent investigations show that the astringent properties of tannin have been exaggerated. Where the uvula is relaxed, the snipping of an elongated portion, especially if other functional or constitutional faults are corrected, may lead to a cure; but in a certain proportion of patients in which the promises of the specialist as to the good effects to be gained by the procedure are not realized, the cause of failure will be found in non-recognition of the various vessels. Treatment of these is best effected by the galvanocautery point, and it is necessary to seal each individual enlarged vessel. For this purpose it may be necessary to make more than one application. Lastly, there is often a hyperæmic tumefaction of the vessels, glandules, and submucous tissues of the pharynx, naso-pharynx, and turbinated bodies; these will also be best treated by galvanocautery.

In conclusion, I would say that in case it may be objected that the conditions I have described are but representative of an advanced chronic congestion, I do not deny that such occasionally may be the case. In the majority, however, there are no such antecedents; and where the two exist, the practitioner will fail to cure his pharyngitis, or what not, until he has recognized and treated the varix.

And it is in this light I have ventured to call attention to the subject as one that is not generally recognized, for beyond a short communication at Milan by my deceased colleague, Llewelyn Thomas, I have seen no allusion to it in any books or archives, and no notice is taken of it by the great teachers of Vienna. I therefore make no apology for having occupied your time with considerations that may at first appear trivial, or of exaggerated importance.

DISCUSSION.

Dr. Carl Seiler said: I quite agree with the speaker, that the *globus hystericus* is rarely of purely imaginary origin. Some chronic inflammation of the upper air passages usually accompanies this distressing condition. As he truly says, pharyngitis is one of the most common causes of this symptom. At the same time the pharyngitis is to my mind, as a rule, the consequence of remote causes which may be looked for in one of three different directions—in a disturbance of the gastric system, in a disturbance of the respiratory function of the nose and naso-pharynx, and, finally, and most commonly in public speakers and singers, in a faulty use of the organ of voice. This latter condition is frequently met in those who simply use the voice for ordinary conversation. The constant irritation thus produced leads to hyperæmia and chronic inflammation, which extends upward, rather than downward, in the trachea. In the treatment of the condition described, I think that little can be accomplished by the application of remedies to the apparent seat of the disease, but that cause must be looked for and removed.

STATED MEETING, SEPTEMBER 28, 1887.

Dr. James Collins read a paper reporting some

PECULIAR SEQUELÆ OF MEASLES.

Measles is usually considered a very simple affection. The respiratory organs and eyes are usually watched. This being accomplished, and care that aural catarrh is not developed being exercised, measles is considered as having been properly treated.

During the recent epidemic I witnessed some sequelæ from meales in which the nervous system seemed to be especially involved.

CASE I.—A girl of eight years. The fever, eruption, and desquamation followed the usual course; and not until several days after the skin had resumed its normal color, and the bronchitis had disappeared, did the symptoms of chorea develop. This child was a blonde, of Irish parentage. The invasion of the nervous symptoms was gradual, but they developed to a violent degree. During the second week the agitation of the child was so great that she could not remain upon the sofa without being guarded or tied. She was unable to feed herself, and was constantly laughing and giggling, as well as twitching.

Cimicifuga, tonics, and applications to the spine were used. The child recovered, and was well at the sixth week.

CASE II.—A girl of eleven years, of German parentage, a dark blonde, also developed chorea, but in a less violent degree. Similar treatment was pursued, and recovery was complete in the fourth week.

The marked nervous element in these cases causes them to be worthy of note.

CASE III.—Kate A., aged three and a half years—the second case of measles in the house. Eruption appeared at normal period, and followed the usual course. Catarrhal symptoms not more marked than usual. Temperature not above 103°, pulse 110 at highest point.

On the third day of the eruption she exhibited a peculiar irregular kick while in bed. Examination revealed that the reflexes of the ankle and knee were exaggerated, while the ability to stand was greatly impaired, and the coördination of the movements of the lower extremities was imperfect. On the following day she was unable to sit up in bed, the arms kept an irregular motion, while the power of grasp was almost lost for small objects. By the fourth day, hearing

was impaired, and by the seventh day eyesight was lost, and action of the sphincters became uncertain. Blind, deaf, and powerless for self-help this poor child for five weeks kept up an idiotic cry, with irregular swinging and aimless motion of arms and legs. The special senses gave some objective evidences of such a grave condition. The eye-ground showed the arteries tortuous; veins full; disk seemed to be choked in either eye.

Dr. Lautenbach, who is skilled in the use of the ophthalmoscope, assured me, however, that the condition was that of a swollen disk from active inflammation, and not a true choked disk. Membrana tympani of both ears normal. From a hyperæsthesia of the reflexes there resulted a condition of impaired sensation, with subnormal temperature, as a rule. After five weeks under the use of absorbent alteratives, and counter-irritation to spine, the child began to improve, and after twelve weeks commenced to walk and see; hearing was slow to return. The reflexes of bladder and rectum also became normal. Yet the child continued nervous, irritable, howling with raucous voice when disturbed or denied any of her wishes.

During the summer she has gradually improved; now walks with gait somewhat wabbling. She eats well, sleeps well, and nourishes well. Her temper is irascible; she drags the right foot, and falls easily. The motion and use of the upper extremities appear to be normal. Hearing nearly normal. Eye-ground shows evidences of some structural changes; vessels still small and tortuous, some choroiditis remains. Vision has improved so that she can distinguish objects, but my last attempt to test it accurately resulted in ignominious failure.

Urine has shown neither albumen nor sugar. Specimens examined were of normal specific gravity, and deposited phosphates on standing.

The following case presents some peculiar conditions:

Case IV.—Edward L., aged nine years, had measles in March, 1886. The attack was severe for four days; and in spite of treatment the recovery was slow. He complained of severe headache, and of seeing double at times. During the spring and summer he seemed to be tolerably well, excepting headache, from which he suffered frequently. In July, 1885, his headaches increased At times his head seemed to be drawn either backward or to one side, the paroxysms lasting four or five minutes, after which he would complain of seeing double. On closing the left eye, vision improved; at times vomited his food with glairy mucus. The lad improved under treatment. Spells of headache became less frequent. As he complained of his eyes, examination showed hypermetropia of 1 D. right eye, 2 D. left eye, with astigmatism in left eye. The optic disk of left eye swollen, right less so. Glasses given in November improved vision, but headache was still persistent at intervals. He got along tolerably well until February, 1887, when headache returned with increasing violence; his gait became unsteady, and double vision increased, becoming almost constant.

In April he was taken to a specialist, who added prisms to his glasses, which, for a time, improved his vision. In May his headaches became violent again; he suffered from attacks of nausea; his gait became more uncertain; he stiffened his feet in walking, and staggered with uncertain movements, frequently falling, but seemed in good spirits; temperature subnormal. Urine pale, passed in large quantities, but neither sugar nor albumen detected. Since July the lad has lost flesh; loses his food by vomiting frequently; often the matters vomited are undigested food with glairy mucus, of yellowish tinge. Pain in head always present before vomiting; head thrown backward; belches, often has hiccough. Temperature subnormal; hands feet usually cold. Generally sleeps well.

The condition of his eyes as I have seen them, and confirmed by Dr. Isett, who is practised in the use of the ophthalmoscope, shows both disks swollen; the arteries small and tortuous; choroid congested. Dr. Isett adds, "no doubt

there is pressure on the brain somewhere." The treatment of this lad has been tonic, alterative, and dietetic. The case presents a peculiar outcome from measles.

I report these to elicit further reports of such cases, and for the sake of calling attention to the effects of measles on the nervous system, which, in these cases, seems to have suffered severely.

DISCUSSION.

Dr. William B. Atkinson said: During the last epidemic of measles I saw more cases of inflammation of the lungs than in any previous epidemic within the last thirty-five years. Catarrhal sequelæ were extremely common. I have not met with the eye troubles, nor have I seen any evidences of brain affection.

I recall two cases, some fifteen years ago, in which the eyes and the brain were so affected that vision was entirely lost. In one case the vision returned after a period of fifteen months, and the child recovered perfectly. In the second case, that of a child eighteen months of age, the vision was perfectly restored at the end of eight or ten weeks. I attribute the restoration of vision, in the first case, largely to the use of phosphorus, which, with intervals of rest, was continued for a year.

Dr. Wm. Welch said: I have never met with the sequelæ referred to by Dr. Collins, but I believe that reference is made to them in elaborate text-books. Such sequelæ are, I think, more frequent after smallpox than after measles. I have seen the hearing and speech during recovery from smallpox, but never from measles. The author of the paper referred to subnormal temperature after defervescence took place. I have noticed this, and also unusual slowness of pulse. In adults, I have frequently found the pulse under fifty, when in the recumbent posture.

Dr. E. T. Bruen said: The question whether or not in these cases, where nervous symptoms have been prominent, there is any lesion of the nervous system, has always been an interesting question to me. I recently had the opportunity of making a post-mortem examination in a case of typhoid fever where nervous symptoms had been well marked from the second week onward. The patient had always been regarded as an hysterical individual. There was spasm of the muscles of the back of the neck, with retraction of the head to the right side. Also spasm of the right arm, with contraction of the muscles, and the right leg was similarly affected. The pupils always responded to light, and there was no paralysis of any muscle. The patient died, and in my absence the post-mortem was made by Dr. Musser. The only abnormal condition found in the brain was the presence of two cyst, one in each fissure of Sylvius. These were about the size of a walnut. They contained clear fluid. There was no evidence of inflammation or of the presence of hydatids. It is a question whether or not these cysts were congenital. This case shows that there may be marked nervous symptoms without special lesions, and at the same time may we not imagine that some of these cases of severe nervous symptoms in the course of the specific fevers may occur in consequence of imperfect development of the cerebral substance? The only case in which I can recall symptoms similar to those described by Dr. Collins was in a child four years of age, and the result of this case was permanent insanity.

ANTIFEBRIN IN ENTERIC FEVER.—Dr. J. Solis-Cohen states that his experience with this drug during his present term at the German Hospital has shown that it is more likely to produce collapse than he has ever found antipyrine to do. In doses of seven and a half grains it has reduced evening temperature from 105° to 96.5°, with a return wave to 102° and over by early morning. He has found three grains in some instances quite as effective as larger doses, while much less dangerous. He urges that physicians should see their patients within an hour or two after administration of the first dose of antifebrin, in order to determine by results the propriety for its repetition.—*Polyclinic.*

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, OCTOBER 15TH, 1887.

Editorial.

THE PRESENCE OF MARCHIAFAVA AND CELLI'S PLASMODIUM IN THE BLOOD OF PATIENTS SICK OF VACCINIA AND OF SCARLET FEVER.—Under the above title there appears in the August number of the *Zeitschrift für Hygiene* an article from the pen of Dr. Pfeiffer, of Weimar. In the present stage of the discussion upon the pathology of malarial fever this contribution is not without interest.

Since the publication by Marchiafava and Celli of their discovery, in the blood of persons suffering from malarial fever, of a body which they suppose to be a living organism and to which, on the strength of their evidence, they have given the name of "Plasmodium Malariæ," numerous other contributions upon this subject have been received. Most prominent among these are from Councilman, who in an extended series of observations, under most favorable circumstances, has been able to demonstrate these bodies in the blood of all cases of malarial fever that it has been his privilege to examine. He has not only found them in the dried and stained specimens of blood but has likewise observed them in fresh specimens, and has not only demonstrated the ameloid movement of those bodies as found within the red blood-corpuscles but has also proven the presence of a body which is apparently outside the blood disk and which has such a rapid and active movement that it is impossible to give it an accurate description. This body is apparently free in the serum and by its very active lashing and twirling movement causes a current of sufficient strength to result in a visible passive movement in the neighboring corpuscles. As yet, Councilman has published only what he has seen and has made no attempt to say whether these bodies are or are not living organisms. In fact, Marchiafava and Celli have themselves no further evidence than this to justify them in drawing their conclusions.

The evidence from these two sources is probably the strongest positive argument in favor of the disease being dependent upon a lower organism. The most common opinion held by the opponents of the theory is, that these structures are not organisms but are vacuolations produced by mechanical alterations in the protoplasm of the corpuscles themselves. They also claim that these bodies are not exclusively confined to malarial blood but are found in the blood of other diseases as well.

Without stating in so many words that it is in support of this latter idea that his contribution is made, yet a careful perusal of the article by Dr. Pfeiffer can lead to no other conclusion.

He states that he has found in the blood of patients suffering from vaccinia and from scarlet fever bodies which he considers identical with the plasmodium of Marchiafava and Celli. He was unable to demonstrate any of those changes upon which Marchiafava and Celli based their theory for the development stages of the organism.

He describes the bodies observed by him as being of an irregular shape and easily stained. They sometimes contained pigment granules and in general had the appearance of vacuolations.

He refers to the publications from other observers who claim to have also found these bodies in the blood of persons suffering from scarlet fever, vaccinia, measles and parotiditis.

In his closing paragraph especially, it is easy to interpretate his ideas as to the nature of these bodies, for he says—"It has often been observed that in

the blood of these diseases the red blood corpuscles take on a prickled appearance due to the adhesion to their surface of small moving bodies that one sees in the serum, and that coincident with the appearance of this prickling does the formation of Marchiafava and Celli's bodies begin, and it continues in proportion as the prickling developes."

He also states that in proportion as pressure upon the serum is increased the number of these vacuole-like bodies is also increased. From an inspection of his plates illustrating his article, it is very difficult for one to rid one's self of the idea that at least *some* of the bodies observed by him were the ordinary *blood tablets* or third blood corpuscle of Bizozzers as they are sometimes called, and that the serrated appearance that he describes as occurring in the red blood corpuscles was only the ordinary change that blood corpuscles commonly undergo after withdrawal from the vessels.

This is hardly the place to enter into the technique of his work on this subject, but it will suffice to say that in his investigations, his method of maintaining an equable temperature was somewhat unique and might be of interest to those proposing to conduct like observations in which it is essential to keep the blood at the body temperature.

Hot Water Vaginal Injections.—The great value of hot-water vaginal injections in the treatment of uterine and pelvic inflammation has been so well shown by numerous observers that it might seem wholly unnecessary to insist upon the use of this agent in connection with the treatment of the female pelvic organs. The good service of the agent will hardly be questioned by anyone who has given it a fair trial. We are satisfied, however, that hot-water vaginal injections do occasion disappointment and are often discarded as absolutely worthless. We are disposed to assign this disappointment and consequent abandonment of the use of the agent to faulty methods of application rather than to the fault of the agent itself. Many physicians direct their patients to use hot-water vaginal injections without giving explicit and positive directions how they should be used, the temperature, length of time and number of times each day the agent should be employed. The general inconvenience attending the use of hot-water injections and the discomfort they may occasion will often induce the patient to go through with an outward form without a conscientious observance of a rational and systematic method of administration. There are many patients who will attempt to persuade themselves and will persuade their physician that they are really employing this agent as they are directed, yet when their methods are investigated they are entirely faulty. To secure the full benefit of hot water the following rules seem to be advisable. First, the temperature should range from 110° to 130° or 140°. Many patients will not endure such great heat as is here indicated. Such cases must be encouraged to employ it at a temperature as high as it can be borne. Second, the recumbent posture is the one usually deemed best, but the position of Sims, or one somewhat more prone, as recently advised by F. P. Foster, of New York, will secure a deeper penetration of the water than is possible in the dorsal posture, and for this reason is more serviceable. Third, the water should be injected slowly into the vagina and should be permitted to remain in contact with the tissues just as long as practicable, say at least from fifteen to thirty minutes. The injections given in the sqatting position should be discouraged rather than employed. The great inconvenience of the dorsal and semi-prone positions is fully recognized, but when the aim of the administration is to shrink up the vessels going to the congested or inflamed uterus and pelvic tissues the necessity for direct contact of the agent with these tissues over-weighs other considerations. It is much better that hot-water injections should be administered by a competent nurse, but where this is not possible the physician should be quite sure the patient is employing the agent in a manner from which she will derive a benefit.

Miscellany.

Contusion of the Abdomen, With Rupture of the Intestine.—The operative treatment of traumatic peritonitis, and of the injuries which cause it, is a subject of universal interest at present. In the October issue of *The American Journal of the Medical Sciences*, Dr. B. Farquhar Curtis, of New York, has studied the general subject by the aid of a series of 44 experiments upon dogs, and an analysis of 116 cases of rupture of the intestine, and of 33 cases of contusion of the abdomen terminating in recovery, with especial attention to the symptoms of the first hours after injury, in the hope of rendering an early diagnosis possible, and to indicate the most promising methods of treatment.

The practical results of the inquiry may be summed up as follows:

The treatment of contusion of the abdomen should be purely expectant in the early stage, until symptoms of internal injury have appeared, or until the full extent of time in which they may be expected has passed. Explorative laparotomy at this time is in admissible.

When symptoms of uncontrollable internal hemorrhage, or serious visceral injury appear, laparotomy is indicated; but, when the diagnosis is uncertain, the operation should always be begun as an exploration.

Great collapse is an absolute contra-indication to all operative interference.

When rupture of the intestine is found, the best method of treatment is to secure the injured gut in the abdominal wound, and form an artificial anus. This can be easily relieved by a later operation, when the patient has recovered his strength.

Hepatic Cirrhosis in Children.—Dr. R. Palmar Howard, of Montreal, reports in the October number of *The American Journal of the Medical Sciences*, two cases of this rare affection in children, in which neither the use of alcohol nor the virus of syphilis can be assigned as the cause. Dr. Howard then presents a very careful study of the clinical histories of the 63 cases occurring in children before puberty of which he has been able to collect the records. As the result of this analysis he finds:

1st. That most of the established causes of the disease in adults obtain also in children, more especially the use of alcohol, present in 15.8 per cent. of the whole number; syphilis, chiefly hereditary syphilis, present in 11 per cent.; tuberculous disease of other organs than the liver, in 11 per cent.; also, but much less frequently than these, venous congestion of the liver, peritonitis, and a general tendency to connective tissue formation in the system.

2d. That syphilis occasionally tends to a diffuse interstitial hepatitis or cirrhosis, by first inducing an adhesive inflammation of the portal vein.

3d. That a general arterio-capillary fibrosis is not proved by these cases to be the usual, and probably not even a frequent, cause of hepatic cirrhosis in childhood.

4th. That more than half of the cases of hepatic cirrhosis in children do not appear to be produced by the above-mentioned well-established cause of that affection.

5th. That there is some evidence that cirrhosis of the liver may be very exceptionally induced by the acute infectious diseases—cholera, typhoid fever, measles, scarlatina, but that proof of this is wanting.

6th. That the habitual use of a stimulating diet, or the absorption of the products of faulty digestion, are probably fruitful sources of hepatic cirrhosis in children.

7th. That it is in harmony with what is known of the causes of hepatic cirrhosis to believe that the bodies known as ptomains may be capable of exciting a cirrhotic condition, and that investigation of this subject deserves attention.

8th. That the period of childhood most liable to cirrhosis of the liver is from the ninth to the fifteenth year inclusive, but that it may be congenital, and may occur at any age after birth.

9th. That it is twice as frequent in male children as in female.

10th. That its symptoms are essentially the same in childhood as adult life.

11th. That it is frequently accompanied by pyrexia.

12th. That ascites or icterus, and frequently both together, are of common occurrence in the atrophic and hypertrophic forms.

13th. That the group of symptoms which have been referred to cholæmia or to cholesteræmia or to acholia, and even sometimes to uræmia, frequently ushers in the fatal issue of hepatic cirrhosis in children.

On The Therapeutic Action of the Sulphate of Spartein.—Dr. J. Mitchell Clarke, of Bristol, records, in *The American Journal of the Medical Sciences* for October, a clinical study of the therapeutic action of spartein. He finds that it raises the arterial tension, and regulates the pulse. The first effect, coming on about thirty minutes after the exhibition of the dose, consists in a strengthening of the force of the heart-beats, with a slowing and regulation of the pulse in cases where this is abnormally rapid. Closely following on this, at about forty-five minutes or one hour after the dose, the arterial tension is raised, and shortly before this rise of tension, or at the same time the surface of the skin becomes red, flushed and moist with, in some instances, free perspiration. During the next two or three hours, for the first part of the time, the surface of the body remains flushed and warm, the arterial tension continues to rise, or to remain at a higher level than before the dose, and the rate of the pulse to be slowed until it reaches or approaches the normal, while from the first the heart beats with increased force, the patient, meanwhile, experiences a marked sense of well-being and of comfortable warmth, with, if it existed, loss of præcordial distress, irregular cardiac action and dyspnœa.

Spartein also causes a variable increase in the amount of the urinary secretions, with increased excretion of area, in correspondence with the increase of water, and this diuretic action we should anticipate as a consequence of the strengthened *vis a tergo*, the rise of blood pressure, and the increased quantity of blood passing through the kidneys. This flushing of the surface was a constant result, except in a few cases. On respiration spartein produces an initial quickening, followed by a slowing, reaching or approaching to the normal rate, at the same time the respiratory movements are of greater depth.

The Prevention and Treatment of Puerperal Fever.—At the recent meeting of the Ninth International Medical Congress, Dr. T. More Madden, of Dublin, read a paper on the above subject before the Section on Obstetrics.

He recommended the following pretionary measures:

1. The most scrupulous attention to puerperal hygiene.

2. The preparatory treatment of the patient—suitable nourishment, fresh air, and appropriate tonics—of primary importance.

The author ordered a mixture of potassium chlorate, iron, and quinine, to be taken during the last couple of months of gestation, and he has never seen puerperal septicæmia in a patient who had been thus treated before her confinement.

3. From the first day after delivery until convalescence has taken place, the uterine cavity as well as the vagina should be daily thouroughly washed out with water, as hot as may be well tolerated, to each pint of which may be added an equal quantity of sanital, which, from its absence of color, as well as its aseptic properties and agreeable odor, seems specially suitable for the purpose. Carbolic acid and rectified spirit of turpentine are good, while corrosive sublimate is unreliable and dangerous.

4. He does not use a siphone syringe, but employs More Madden's irrigator.

5. As a general rule liquor creasotæ (B. P.) should be administered two or three times daily in full doses. This may be advantageously combined with the tincture of the chloride of iron.

6. The prevailing type of puerperal fever is of a distinctly remittent typhoid character, and should be primarily treated by appropriate general stimu-

lants and nutriments, as well as by attention to the removal of all septic matter from the uterus, in the way already pointed out. Turpentine, iron, quinine, ergot, and opium, are the only medicines that deserve consideration. Turpentine, the most important, may be exhibited per os, or per rectum, or by the skin. Turpentine is stimulating, depurating, increasing the elimination by the skin and kidneys, and arrests the development of microörganisms.

The Avoidance of Overpressure in Schools.—The Committee of French Academy of Medicine reported as follows on this question: "The Academy of Medicine calls the attention of the public authorities to the necessity of modifying, in conformity with the laws of hygiene and the necessities of the physical development of children and young people, the present arrangements of our scholastic establishments. It thinks that the colleges and lycées for boarders should be removed to the country; that wide, open spaces should be set apart for games; and that the class-rooms should be improved as regards lighting and ventilation. Without dealing with the course of study—which it desires to see simplified—the Academy calls special attention to the following points: Increase of the time for sleep, as regards young children; for all the pupils a diminution of the time devoted to study and classes—that is to say, to sedentary occupations—and a proportional increase of the time for amusement and exercise; the absolute necessity of submitting all the pupils to daily exercise in physical training, proportioned to their age—namely, walking, running, jumping, formations, evolutions, regulated and prescribed movements, gymnastics with apparatus, fencing of every kind, games of strength, etc."—*British Medical Journal*, Aug. 13, 1887.

The Cardiac Relation of Corea.—The heart symptoms of chorea demand special consideration as among the most important and peculiar features of the disease. Chorea is rarely a fatal disease in children, and hundreds of cases may be treated without a death. By far the most serious fact in the clinical history of the disease is the occurrence of endocarditis; but here the danger is remote, not immediate, and lies in the changes which an acute valvulitis may initiate. A satisfactory study of the cardiac relations of chorea embrace the condition during the attack, and the subsequent heart history after a period of years. The first question has engaged the attention of many workers, and in the October number of *The American Journal of the Medical Sciences*, Dr. William Osler, of Philadelphia, works out the second on a scale not hitherto attempted. He has carefully reëxamined 110 of the choreic cases treated at the Infirmary for Nervous Diseases between 1876 and March, 1885, the examination in every case having been made more than two years subsequent to the attack of chorea. In 43 cases the heart was normal, in 54 there were signs of organic disease, and in 13 there was functional disturbance.

A study of these cases, Dr. Osler thinks, justifies the following conclusions:

1. That in a considerable proportion of cases of chorea—much larger than has hitherto been supposed—the complicating endocarditis lays the foundation of organic heart disease.

2. In a majority of cases the cardiac affection is dependent on rheumatism, and cannot be regarded as in any way associated with it; unless, indeed, we hold with Bouillaud, that the disease "chez les jeunes sujets, le cœur se comporte comme une articulation."

3. As the presence of an apex systolic murmur in chorea is usually an indication of the existence of mitral valvulitis, as much care should be exercised in this condition as in the acute endocarditis of rheumatism. Rest, avoidance of excitement, and care in convalescence, may do much to limit a valvulitis, and obviate, possibly, the liability to those chronic nutritional changes in the valves wherein lies, after all, the main danger.

Hereditary Tremors.—Dr. C. L. Dana, of New York, in the October number of *The American Journal of the Medical Sciences*, calls attention to a peculiar hereditary motor disorder which has not heretofore been systematically described, but which he has seen, and studied in three families, and in all it produced a general clinical resemblance.

The affection consists of a fine tremor, controlled for a brief time, affecting nearly all the voluntary muscles, chronic, beginning in very early life, not accompanied with paralysis or any other disturbances of the nervous function. It resembles to some extent the tremor of paralysis agitans, still more a simple neurasthenic tremor. A most striking clinical feature is its marked hereditary or family type, and its transmission along with other nervous diseases.

It begins in infancy or childhood, sometimes being brought out by an infectious fever. It continues without progressing in severity during a lifetime, which it does not shorten. The family history will reveal neuroses or psychoses. The upper extremities are most noticeably affected, but it may involve the head, neck, eye, laryngeal, or, in fine, any of the muscles. It ceases during sleep, and can be inhibited temporarily by the will. Everything that produces excitement or nervousness increases the tremor. It may be barely noticeable, except under some excitement, or the influence of alcohol or tobacco. It does not interfere with delicate coördination. It neither stops nor increases on ordinary voluntary movements, in this respect differing from the tremors of paralysis agitans, or multiple sclerosis. There may be with it slight contractures of the fingers, also developed early and non-progressive, but there are none of the forced movements, rigidity, paresis, subjective sensations, or vasomotor disturbances of paralysis agitans, while the head and neck are not so much affected, as in senile tremor. The tendon-reflexes may or may not be exaggerated. The tremor is most nearly like that occurring in neurasthenic states, or from poisons, only there is no general nerve exhaustion, and no muscular weakness. It is associated with other neuroses or psychoses, such as insanity, inebriety, and epilepsy, and also with examples of unusual talent or intellectual vigor.

Phosphate of Copper in the Treatment of Phthisis Pulmonalis.—The following formulæ have been employed by Luton, of Reims, and are reported by him in the *Revue Générale de Clinique et de Thérapeutique* of September 8, 1887:

℞.—Cupri acetat. neut. gr. $\frac{1}{6}$
Sodii phosphat. cryst. gr. $\frac{5}{6}$
Liquiritiæ pulv.
Glycerin. āā q. s.—M.

For each pill.
Also,

℞.—Cupri acetat. neutral gr. $\frac{5}{6}$.
Sodii phosphat. crystal. gr. $8\frac{1}{2}$.
Mucilag. acaciæ.
Aquæ āā ℥2.—M.

Sig.—Dose, a teaspoonful as indicated. For hypodermatic use.

℞.—Cupri phosphat. (newly precipated) 1 part.
Glycerin.
Aquæ dest. *āā* $2\frac{1}{2}$ parts.

To be mixed at the moment of administration.—*Medical News.*

House-Flies as Carriers of Tuberculous Contagion. — Spillman and Haushalter have recently reported to the Academy of Sciences (Paris, Session August 16th) their investigations as to the possibility of "contagion" (bacillus) of tuberculosis being carried by house-flies, and the results make it extremely probable that these pests of our dwelling-houses and hospital wards may have much to do with the propagation and disseminations of such contagion.

These investigations included repeated examinations made of the excrements and intestines of flies that had fed on the contents of the spit-cups of consumptive patients. In both, they found abundance of tubercle bacilli. They also

found the same bacilli in the dried excrements of flies scraped from the windows and walls of rooms occupied by phthisical patients. The experiments show how easily such germs may be disseminated by the dried excrements, or even by the dessicated and pulverulent remains of the bodies of these insects; how easily the air of respiration, or the food and drink, may be thus polluted and infected. It is known that the germs of the tubercle bacillus have great tenacity of life. These observations also indirectly strengthen the belief that the suitable soil is quite as essential to the development of tuberculosis as the suitable, otherwise the disease would inevitably be far more common than it is.

Spillman and Haushalter, as a practical deduction from these investigations, insist on the importance of thorough disinfection of the spit-cups of tuberculuous patients, by means of strong solutions of phenic acid or corrosive sublimate.—*Boston Med. and Surgical Journal.*

Salicylates.—The possible evil results of long course of salicylic acid or salicylates, formed the subject of an interesting discussion before the French Academy of Medicine, leading to the condemnation by that body of these agents as preservatives in articles of food. The evidence adduced was certainly suggestive of possible renal disease and arterial sclerosis as a result of cumulative irritation from long-continued use of the drug, even in very small amounts.—*Boston Medical and Surgical Journal*

Diverse Applications of Antipyrin in Therapeutics. — In the *Medical News* of May 28, 1887, we called attention to the results obtained by Germain Sée in the treatment of certain painful neuroses by antipyrin, his original observations being recorded in *L'Union Médicale* of April 26, 1887. Since that time Professor Sée has not been content with so limited a use of the drug, and in the same journal of September 10 and 13, 1887, we find records of the application of the remedy to a very large number of diseased conditions associated with pain. Among these we may mention both acute and chronic articular rheumatism and the acute paroxymal pains of gout, lumbago, sciatica, and the neuritis of ataxics.

In the second division of his paper, Sée records his use of this drug in painful conditions associated with disorders of the viscera, chiefly abdominal. Chief among these are renal and hepatic colic, colic of a gastro-intestinal type, and that associated with the uterus. Passing on, he speaks of its efficacy in the pain of angina pectoris, and of anæmic heart. Finally, he compares it with antifebrin, and gives no small amount of praise to the drug of which he writes. In the *Centralblatt für klinische Medicin*, No. 35, is a paper by Dr. Seifert, of Würzburg, on the same subject, in which he speaks of the value of antipyrin in hemicrania, angina pectoris, and chorea. This writer also speaks very favorably of the drug as used in these conditions. In view of the results so uniformly attained, by observers on the other side of the water, it is a little surprising that reports of its use by American practitioners should be so few and meagre.—*Med. News.*

Odontalgia or Neuralgia?—The great difficulty occasionally experienced in diagnosticating whether neuralgic pain of the fifth nerve is due to peripheral irritation from disease of the teeth or to some affection of the nerve trunk, made Prof. Victor Horsley's paper on this subject at the Odontological Society of considerable interest, especially to dental surgeons. The principal points of distinction may be summed up under the following heads: 1. Trophic changes, such as muscular wasting in the parts to which the pain is referred, chronic congestion, or alternating dilation and constriction of the bloodvessels, point to mischief in the trunk of the nerve. 2. Alterations in sensation, anæsthesia or hyperæsthesia of the skin, especially when gently touching the skin causes extreme pain, while firm pressure causes no pain at all, are,

he believes, never due to dental irritation. 3. The origin and character of the pain are sometimes useful as a means of diagnosticating the two conditions. When the pain begins in the skin or bone, and subsequently is referred to the teeth, the probability is that the lesion is in the nerve trunk; if it is stated to begin in the teeth, it may not be due to them. Professor Horsley expressed the view that *constant* pain is in most cases of peripheral origin, whereas intermittent pain is due to trouble nearer the nerve centre; but this is opposed to the experience of most dental surgeons intermittent pain being a frequent accompaniment of dental disease. Lastly, the existence of "tender spots" along the course of the nerve or its branches, is generally an indication of irritation along the whole course of the nerve, but occasionally occurs in cases ot peripheral irritation.—*Lancet*, September 3, 1887.

Dyspepsia with Anorexia.—Dr. H. Huchard suggests the following formula.

℞.—Syr. aurant amari corticis, 60 (℥xv)
Tr. rhei,
Tr. gentianæ, } *aa* 10 (℥iiss)
Tr. nucis vom.
Chloroform, gtt. x.

M. Sig. Teaspoonful with each meal. —*Nouveaux Remedes*, July 24.

To Disguise the Taste of Cod-Liver Oil.—To remove the unpleasant flavor of cod-liver oil, Revista Balear recommends the following method: Cod-liver oil, 400 grammes; ground coffee, 20 grammes; animal charcoal, 10 grammes. Mix them well together, and place them in a glass at a temperature of from 50° to 60° F. for four hours. Place the mixture aside for two or three days, and then filter through paper. The odor and flavor of the coffee persists, and conceals that of the oil.—*Medical Press and Circular*, September 7th, 1887.

Treatment of Lupus.—Dr. Drewitt described the case of a child in whom a patch of lupus had been treated in one part by Unna's plaster of salicylic acid with creasote, the surface having been washed with a solution of cocaine before each application. At the end of a month the granulation nodules had all suppurated out, leaving little pits surrounded by healthy skin. The other part was treated by scraping. There has been no return of the disease in either part, but there has been more tendency to contraction in the part which was scraped.—*Provincial Medical Journal.*

The Treatment of Hepatic Congestion.—Jules Cyr is quoted by the *Review de Therapeutique*, as using the following treatment:

1. Application over the liver of compresses of cold water, often renewed; two or three leeches about the anus.

2. At evening, three-fourths of a grain of calomel should be taken, followed the next morning by five drachms of Glauber's salts.

3. As beverage, milk and Vichy water, or seventy-five grains of ammonium chloride in a quart of water.

4. A douch, while the patient is reclining, of water at a pleasant temperature, given over the hepatic region.—*Med. News.*

Carminative for Colic in Infants.—Dr. McGee recommends the following:

℞—Magnes. carb. ℈ij.
Ol. anisseed ♏j.
Tr. cardamoni,
Tr. assafœtidæ ♏ij.
Glycerine ℥ij.
Aquæ menthæ viridis,
Aquæ camphoræ ad fl. ℥ij

M. Sig.—Teaspoonful every half-hour till child is comfortable.

This does not preclude warm baths, hot cloths on abdomen, relief of constipation if present, massage, etc, *but it does* all opiates and soothing syrups.—*Medical Record.*

Dr. J. D. Bryant, the Surgeon-General of the State of New York, and a Professor in Bellevue Hospital Medical College, has accompanied President Cleveland on his Western trip.

Medical Items.

Dr. Samuel G. Dixon has been elected Professor of Hygiene in the University of Pennsylvania, to succeed the late Prof. N. Archer Randolph.

A Sanitary Convention is to be held at Albion, Mich., on the 6th and 7th of December, under the auspices of the State Board of Health.

Professor von Langenbuch, the distinguished Berlin surgeon, is dead. Not long ago he was made a baron in recognition of his long and remarkable services to surgery and education.

The *Medical Record* states that Dr. N. Senn, the well-known surgeon, began practice as a country doctor in Wisconsin, but has managed to do as much experimental surgery as anyone in the country. "It is not the opportunity always, but the man."

The Baltimore Academy of Medicine will hold its first meeting of the present Winter session on Tuesday October 18th. The place of meeting and subjects to be presented will be announced on Postal Cards sent to members.

The Clinical Society of Maryland, at its meeting held October 7th, elected the following officers to serve during the ensuing year: President, Dr. N. S. Keirle; Vice-President, Dr. J. H. Branham; Treasurer, Dr. S. T. Earle; Recording Secretary, Dr. W. J. Jones; Corresponding Secretary, Dr. G. J. Preston.

Of the eight cholera patients arriving in the *Alesia*, two have died at the hospital on Swinburne Island; and among the well passengers, who were transferred to Hoffman's Island, there have been six cases and five deaths. Two new cases of the disease have developed.

The distinguished dermatologist, Professor Unna, while in New York City, is said to have been called in consultation over the case of a well-known and wealthy lady there. The fee received, $6,000, is probably one of the largest ever obtained by a dermatologist.—*Med. Rec.*

Theatre Physicians.—The ordinance recently put into force in Paris for the regulation of theatres, provides that each theatre must have a corps of physicians proportionate to the size of the theatre, one of whom must be constantly in attendance during the performances. In the physician's office must be placed an ambulance call.—*Med. News.*

Dr. S. P. Neklevitch, of Lozki, Russia, in the one hundred and ninth year of his age, and still in the active practice of his profession, dropped suddenly dead recently, while in the act of writing a prescription for a patient. If the physicians in Russia will persist in holding on to their patients so far into the second century of their existence, there is little wonder that so many medical students become Nihilists.—*Boston Med. and Surg. Jour.*

Pranzini's Brain.—The brain of Pranzini, a murderer recently guillotined in Paris, weighed 1280 grammes (between three and four pounds). An interesting phenomenon was the presence of air bubbles in the arachdoidean spaces, and between the convolutions, which is seen in bodies of those guillotined. It is caused by the vacuum produced by the sudden withdrawal of a large quantity of blood from the vessels.—*Med. News.*

The Medical Examining Board of Virginia will convene in the Senate Chamber at Richmond at 8 P. M., Monday, October 17th, 1887. Applicants for permission to "Practice Medicine and Surgery in Virginia" will please present themselves promptly at the same place at 9 A.M. Tuesday, October 18th, 1887. By order. H. Grey Latham, M.D., President of Board. Hugh T. Nelson, M.D., Secretary and Treasurer.

How to cut glass with a pair of scissors is not new, but may be of interest to our readers. According to the *Pottery Gazette*, glass may be cut under water with great ease, to almost any shape, by observing the following directions: The glass must be kept quite level in the water while the scissors are applied; and, to avoid risk, it is better to perform the cutting by taking off small pieces at the corners and along the edges, and to reduce the shape gradually to that required. The softer glasses cut the best, and the scissors need not be very sharp.—*The Western Druggist.*

The Baltimore Gynæcological and Obstetrical Society held its first meeting of the season on October 11th, and elected the following officers to serve during the ensuing year: President, Dr. H. P. C. Wilson; Vice-Presidents, Drs. F. E. Chatard, Jr., and John Morris; Secretary, Dr. C. O'Donovan, Jr.; Treasurer, Dr. Robert T. Wilson. The Society meets on the second Tuesday of each month, October to May inclusive, at the residences of members in alphabetical order. The membership of the Society is limited to 25. There are at present nineteen active (one honorary) members.

Antisepsis in Duels.—In a recent duel between French journalists, the seconds had taken the precaution to dip the swords of the combatants in carbolized solution; as the result, their wounds healed without suppuration, and they were about in a few days after their encounter. *Le Progrès Médical* suggests that in duels with pistols, bullets which had been sterilized by immersion in proper liquids, or treated at proper temperatures, be employed. We suggest that germs previously agreed upon by the combatants be selected in place of bullets and swords, and that duels by inoculation be instituted as a refinement characteristic of Nineteenth Century medicine.—*Med. News.*

Original Articles.

THE POSITION WHICH CHEMISTRY OCCUPIES IN ITSELF AND IN ITS RELATION TO MEDICINE.*

BY W. SIMON M.D., PH.D.,

Professor of Chemistry in the College of Physicians and Surgeons of Baltimore.

Chemistry like every other science, has its history. Date and place of its birth are unknown. Whilst it is often claimed that chemistry as a true science is not much older than one hundred years, yet we have a right to assume that the foundations were commenced at the time when human beings first appeared and learned how to conduct such chemical processes as combustion, the conversion of fruit juices into alcoholic liquors or vinegar, the separation of metals from their ores, etc. These processes, accidentally discovered, involved chemical principles, which, however, were neither understood, nor was an attempt made at the time to give an explanation.

In another, the alchemistic period, lasting many centuries during the middle ages, a certain number of men commenced to carry on chemical operations for a definite purpose, which consisted mainly in the wild endeavors to convert common metals, such as lead or copper, into gold. The substance supposed to possess this power of conversion was either the philosopher's stone or a certain mythical tincture, a life elixir which was also a universal panacea for all ills and was expected to rejuvenate the aged, prolong life, and change folly into wisdom.

This alchemistic mania infested Europe about the 12th century and attained immense proportions in the 16th century, when all classes of people were infatuated with this strange superstition, and he who was supposed to be initiated into its secrets received the proud title of Magister and Philosopher. Many of the formulæ for the preparation of gold were given, but the language was always couched in vague and mysterious terms, as for instance the unique formula which reads: "If thou would make the Elixir "of the Sages, take the Mercurius of the "philosophers, by means of calcination "convert it slowly into the green and red "lion; digest it with the pungent spirit "of wine and distil the resulting pro-"duct. But let thy retort be covered with "the cimmeric ash and there will appear "upon the bottom the black dragon de-"vouring his own tail."

Unfortunately, we are not told where the gold was to be found after the voracious dragon had eaten up his own tail.

Whilst the thousands and thousands of chemical experiments, made empirically during these centuries, did not lead to the discovery of the philosopher's stone and did not reveal a panacea for all diseases, yet many valuable discoveries were made during this period. Processes, by which certain mineral acids can be obtained, were discovered; the nature and mode of preparing salts of mercury, antimony and other metals were made known, phosphorus and many other substances were discovered and thus material, which was to serve for the building up of our science, was gradually evolved.

A new line of thought and reasoning was introduced at the beginning of the 16th century by Paracelsus, who was both alchemist and physician. He was the first one to see clearly that all changes taking place in the animal body are of a chemical nature and that a disturbance of these normal changes causes disease; he reasoned further that the treatment of disease must consist in administering such chemical agents, as would restore normal conditions. In accordance with these views Paracelsus and his followers looked upon medicine as a branch of chemistry, which was to give an explanation for the processes of life, was to unravel the mysteries of disease and to furnish the means for restoring the abnormal condition, *i. e.* disease, to normal conditions, *i. e.* health.

By the numerous experiments of the unsuccessful manufacturers of gold, life elixir and philosopher's stone on one

*Introductory Address delivered in the College of Physicians and Surgeons of Baltimore, Oct. 3, 1887.

side and the equally numerous experiments of the alchemistic physicians, a sufficient number of well-established facts was collected to lay, when properly arranged, a good foundation for chemistry as an independent and true science.

As such it was established in the latter part of the last century or about 100 years ago. With the discovery of oxygen, with the introduction of the balance in the chemical laboratory, with the correct explanation furnished for the process of combustion and with the recognition of the fact that matter is composed of undecomposable or elementary material and finally that this elementary matter combines in fixed and definite proportion with other elementary matter—a new era dawned for our science.

By the united effort of hundreds of willing workers the scattered material is collected, properly arranged and built up, and, as the result of it, we behold a science, grand and beautiful.

Like every well-built structure, chemistry rests upon a sound and solid foundation, which is made up by a number of those grand simple laws of nature,which human thought, human skill and human reasoning have discovered to exist. These laws are eternal as the world itself and upon this unchangeable foundation the structure of our science has been erected. For over a hundred years thousands of willing hands have worked and labored to build up the walls of this immense structure with its numerous wings and towers and ornaments, and yet more building material is discovered and collected every day, so that it is impossible to say when the great edifice will be completed. Most likely, not as long as human thought and human skill last; it cannot be finished because chemistry is not a dead, but a living science, because it is a living organism and there can be no stand-still in any living being.

You may ask: What then is it so much to be admired in chemistry? What has it done and accomplished to be spoken of in such terms of flattery? Let me endeavor to answer these questions as briefly as possible.

Every science is the accurate knowledge of a certain class of facts properly arranged and systematized. The relative lower or higher position which a science is entitled to occupy, depends upon a series of circumstances. A science must necessarily stand high when the field of the material taken into consideration is large, when the knowledge which has been collected is accurate and perfect, when its aims and objects are noble, pure and lofty, when its application to practical purposes is of a deep and general nature, when it elevates the mind and brings bliss and welfare to mankind generally.

Let us see how chemistry answers these requirements. In regard to the first point, the material it deals with, chemistry certainly stands well, as it embraces in its study all and every kind of material and considers all matter that composes the objects of the mineral, the vegetable and the animal kingdom; it is not satisfied with the consideration of the material found on our earth, but it extends it researches to the universe and by means of that wonderful instrument, the spectroscope, examines into the chemical nature and elementary composition of those worlds, which are millions and millions of miles distant. In regard then to the quantity of material it deals with, chemistry does not stand second to any other science.

The next point is the accuracy and correctness of the accumulated facts. It is undeniable, that in this respect mathematics occupy the highest position, but it is equally true that those sciences, which rest upon a mathematical basis or upon laws which are as true as any mathematical facts, approach more or less (according to the amount of strictly mathematical knowledge they embrace) the model science itself. And chemistry certainly does rest upon a number of laws, which are mathematically correct and it is in its power to control with absolute correctness and certainty thousands and thousands of those phenomena, which we call chemical changes. Moreover chemistry is not satisfied with the actual knowledge which has been and is constantly brought out, but it has reached a point where it speaks of

coming events and predicts the existence of unseen and unknown matter with a certainty, equalled only by that with which astronomers speak of the events that are to take place in the universe for centuries to come. It was no doubt a triumph of astronomy, when the existence of an unseen planet was predicted, the prediction being founded entirely on those mathematical calculations of which the law of gravitation is the basis and when this prediction was afterwards verified, through the actual discovery of this unknown body. Chemistry proudly points to similar results. The existence of thousands of unknown compound substances has been predicted and in hundreds of cases these substances have been made and it has been found that the properties of these substances correspond with reasonable exactness to the properties which had been previously predicted for them.

But chemistry has accomplished even more within the last few years by predicting the existence of unknown elements. It had been shown that the 63 known elements may be arranged systematically according to their atomic weights and according to their physical and chemical properties into a series of groups; in doing this it has been noticed that certain places in this system were not filled and the conclusion was drawn, that these empty spaces belonged to elements as yet unknown. Moreover, the properties of these elements were predicted; it was foretold that such and such a missing element should and would have such and such an atomic weight, such a vapor density, such a specific gravity, that its compounds with other elements would have such and such properties. It was a bold and hazardous prediction, much ridiculed at the time by a certain class of scientists, and yet these predictions have since been verified, in three instances. Three new elements (Scandium, Gallium and Germanium) have been discovered and fit into the spaces, left open for them in the system, with all their physical and chemical properties with an accuracy and exactness, surprising even the most enthusiastic friends of the system. These, then, gentlemen, are a few data taken from the recent history of our science, which may show that I have a right to claim for chemistry an accuracy and correctness of the accumulated facts.

As a third point of comparison between chemistry and other sciences, I mentioned its aims and objects, which should be noble, pure and lofty. It is the aim and object to lay open, as it were, the interior nature of all bodies, to explain the changes which matter constantly undergoes, to discover the laws which govern these changes, to investigate the chemical processes taking place within the living organism, thus participating in the great and noble task of seeking to solve the mysteries of life.

This, then, is the chief mission of chemistry and much has been done to accomplish it, though undoubtedly much more is left for posterity to achieve.

That we have penetrated into the interior nature of matter is amply proven by the fact, that we surpass the best microscope a hundred thousand times in regard to what we see of the interior nature, the formation and construction of matter by purely chemical means. We speak of particles of matter, the atoms and molecules so infinitely small, that many thousands of them would have to be piled upon one another, before the highest power of our microscope could detect the presence of any matter at all. And yet we know the weight and size of these particles; we show that they constantly move and we know the rate of velocity, we know that they have the power of attracting one another and that the amount of attraction is different for the atoms of different elements, that some have, so to speak, but one arm, others 2, 3, or 4 arms by means of which they grasp one another. In short, these extremely small particles of matter are to the chemist what the heavenly bodies are to the astronomer, they are as Sir W. Thompson expresses it: "Pieces of matter of measurable dimensions with shape, motion and laws of action, intelligible subjects of scientific investigation."

And to study the motion of these

minute particles, to show how they grasp one another in millions of different proportions in order to form the multitude of matter which surrounds us; these are the aims and objects of true chemistry and they are certainly worthy to invite the brain power of our very best thinkers.

The next point to be mentioned is the application of the results obtained by the pure science to practical purposes; and what chemistry has done and is constantly doing in this respect, is simply immense. Civilized life as it surrounds us to-day could not exist, had it not been for the application of chemical knowledge to almost every art, science and industry, upon which our present mode of living depends. So multifarious and manifold is chemistry in its various applications that I hardly know how to find time for even an enumeration of the more important ones; wherever we look, in whatever direction we turn, we find a direct or indirect application of chemical knowledge.

Chemistry has taught us how to restore to the exhausted soil its bread producing power by applying the proper elements; how to convert coal into illuminating gas and a by-product, the black coal tar, which again serves as the starting point for the manufacture of a large number of the most brilliant and beautiful colors, the analine dyes, the discovery of which has completely revolutionized the art of dyeing and color printing; chemistry has taught us how to extract valuable metals from their ores and compounds in a manner and completeness unknown in former times; in thousands of factories chemical products of every kind and description are manufactured and used everywhere and for every variety of purpose.

There is probably not a single article made now-a-days, no dress or toy, no tool or piece of machinery, no paper, no ink, no ornament, etc. in the manufacture of which directly or indirectly chemistry has not aided materially.

This, gentlemen, is what my science in its practical application has done for mankind and I hope that you will agree with me, when I claim that chemistry, whilst grand and beautiful in its purely scientific part, has also been a blessing to mankind through the practical application of its teachings.

And yet in speaking of the present position of chemistry, I have intentionally omitted to mention one of its pre-eminently important features, those namely, which are to be found in its relation to medicine. This relationship is necessarily intimate and of great consequence.

In the first place chemistry has furnished medicine with a large number of valuable remedies, the discovery of which would have been an impossibility had it not been for the aid of chemical skill.

Chemistry has taught us how to extract from vegetable matter those substances, generally called the active principles or alkaloids, which seem to concentrate the medicinal properties of the plants themselves. The physician of to-day is thereby enabled to give to his patient in a dose of a few grains what his brother of former days had to administer in the shape of an infusion or decoction filling a moderate estimate not less than a quart bottle, but often two or three. Or the poor patient was made to swallow ounces and pounds of some powdered bark, root, seed or herb. These powders might or might not contain the quantity of active principles which the doctor saw fit to prescribe and the patient besides getting this unknown quantity of medicine had also the doubtful benefit of all the cellulose, the tannins, gums, starch or whatever else might have been present alongside of a good deal of adhering dirt and dust. All this is very different now. In a facetious spirit a doctor remarked some twenty years ago that it seemed as if the time would come when a physician could carry the whole contents of a drug store in the head of his cane, and to a great extent this prediction has been verified, thanks to chemistry.

It was my science which presented to the medical profession such agents as chloroform, ether and cocaine, by the use of which human suffering during painful operations has been immensely

reduced, and again my science has presented such antiseptic agents as carbolic acid and others, through the use of which these now painless operations are also rendered harmless. The physician of even twenty years ago would have trembled at the thought of undertaking certain operations which are performed by the surgeon of to-day with as much calmness and certainty of success as if the operation concerned simply the carving of a Thanksgiving turkey and not of a living human being; and all this thanks to the introduction of antiseptics, which the chemist has prepared.

It is however not only materia medica, therapeutics and operative surgery which have profited by my science; other branches are perhaps even more benefitted by it.

Think, for instance of modern hygiene; how could this science exist without the aid of chemistry? The air we breathe, the water we drink, the food we eat, the soil upon which we walk, they all must be, considered from a hygienic standpoint, of a certain character, quality and purity and besides the microscope it is chemical analysis which serves to decide the question of fitness.

In regard to foods (and many other articles) I am willing to admit that it is often chemistry itself, which provides the unscrupulous dealer with ways and means of sophistication. On the other hand it is chemistry which detects these frauds and when it cannot do so, why then the artificial article is in most cases as good and often better than the so-called natural product. For my own part I prefer really well-made oleomargarine to most of the natural boarding-house butter which is but too often served to medical students and I have had many a glass of artificial wine, which tasted fully as well and better than some of the true unadulterated article, which so often reminds one more of a diluted vinegar than anything else. The pharmacist, so often the doctor's right-hand, not unfrequently has occasion to modify the nonsensical or even dangerous prescriptions sent him by the physician not familiar with the non-compatibility of different drugs and chemicals. Well enough if the druggist sees the mistake and corrects it, though even this is not very pleasant for the medical man, but worse, at least for the patient, when the blunder is not discovered and actually carried out. Chemistry therefore, considered from this standpoint, shows also the intimate relationship to medicine.

Again, many antidotes used in cases of poisoning act strictly chemically and an understanding of these actions requires a knowledge of chemistry.

Finally, gentlemen, let me refer to the relation between physiology and chemistry. Physiology explains (or tries to explain) the various changes and processes taking place within the living organism and which in their total make up life; but life as far as the assimilation of food, its conversion into various tissues, secretions and excretions is concerned, is altogether a chemical process and physiology without physiological chemistry would scarcely be more than a rule of thumb practice.

It is chemistry which has given us an explanation of digestion, which has taught us that our body is a highly complicated machine in which a certain amount of fuel is burnt every day in order to accomplish a certain amount of work. And whenever these chemical changes take place in an abnormal manner, we are bound to have disease, and frequently these abnormal processes taking place within, manifest themselves in an abnormal character of the waste products of animal life and the analysis of urine is therefore in many cases an infallible guide for the determination of the nature and progress of the disease.

Unfortunately physiological chemistry is still in its infancy, yet what already has been accomplished with its aid, shows that it is a field which some day is sure to bear rich fruit and will help us materially in unravelling the mysteries of life.

These remarks, gentlemen, brief as they were, must suffice to show the intimate relation between chemistry and medicine, they will, I hope, impress upon your minds the absolute necessity of chemical knowledge for every physi-

cian. I know quite well, that a physician cannot at the same time be a perfect chemist, but the study of medicine without the aid of chemistry, is now-a-days inconceivable. It would also be folly on the part of the student to attempt the study of physiological chemistry without having previously mastered the general elementary principles of the science. Every medical specialist has to have a general knowledge of all the various sciences which in their total form medicine, before he can do much good in his special field. And similarly a broad and solid foundation must be laid in chemistry; the student must have accustomed himself to think chemically, so to speak, before he can profit from any of the special branches of chemistry.

PRACTICAL NOTES ON URINARY ANALYSIS.

BY WILLIAM B. CANFIELD, A.M., M.D.,

Chief of Throat and Chest Clinic and Lecturer on Normal Histology, University of Maryland.

(*Continued from last issue.*)

II. Normal Constituents of the Urine.

A. organic.—1. *Urea.*

Urea forms the most important product of decomposition of the albuminous bodies, and the amount excreted is dependent upon the amount of albumen in the food. As about one-half of the solid constituents of the urine consist of urea, we may most readily determine approximate variations in the amount of the latter by means of the specific gravity. There are many test quantitative and qualitative for the detection of the presence of urea in human urine, but the most convenient is the microscopic test. A drop of urine is put on a glass slide and a drop of nitric acid added, and the whole is gently heated over the lamp and allowed to cool. The hexagonal and quadrilateral plates of the nitrate of urea, both single and in strata, will be formed. They overlap each other like shingles on a roof. In doubtful diagnosis between a hydronephrosis and an ovarian cyst, the presence of the crystals of the nitrate of urea in the former case and their absence in the fluid of an ovarian cyst would be almost decisive. If the urine be free from sugar and albumen, and contains the normal amount of the chlorides, and its specific gravity be 1020–1024, then it should contain normally 2 to 2.5 per cent. of urea. If the specific gravity be 1014 then 1 per cent. of urea. If the specific gravity be 1030 then 3 per cent. of urea.

The amount of urea is *increased*,

a. In an exclusively animal diet.

b. In an increased breaking up of the bodily albumen. As in diabetes mellitus, in fevers before the crisis, in phosphorus poisoning, in dyspnœa.

The amount of urea is *diminished*,

a. In a non-nitrogenous diet and in inanition.

b. In uræmia.

c. In acute yellow atrophy of the liver.

d. In chronic diseases.

2. *Uric Acid.*

Uric acid is in the urine almost always combined with potassium, ammonia, calcium, magnesium, sodium, in the form of the urates.

There being bibasic salts we have the neutral and the acid salts. The neutral urates are soluble in water and rarely met with when the acid urates are precipitated and crystallized. Uric acid and the urates appear in the form of rhombic plates, whetstones, barrel, envelop, spear, fan, comb, dumb-bell etc. They are generally colored reddish. Sodium and potassium urate or brick dust sediment is easily soluble in warm water and with difficulty soluble in the cold. It disappears on heating; it adheres to the pot or glass and is more often seen in cold weather, in concentrated urine and when the urine is strongly acid.

Uric acid and the urates are *increased*,

a. In rich animal food with little exercise.

b. In fevers.

c. In leucæmia with enlarged spleen and in pernicious anæmia.

d. In the so-called uric acid diathesis.

e. In all diseases of the heart and lungs and in fact in all conditions (abdominal tumors, liver trouble, etc.) where the function of the diaphragm is interfered with.

Uric acid and the urates are *diminished*,

a. In chronic diseases.

b. During an attack of gout.

The microscopical tests are the most convenient, but require skill. When the red granulated crystals on the bottom and side of the vessel disappear on heating and appear in the cold and disappear on adding caustic potash or soda solution we may presume they are the urates.

3. *Oxalic Acid.*

The presence of the oxalate of lime crystals as envelop-shaped crystals is scarcely of practical importance. They are present in large numbers in so-called oxaluria, and in some calculi. As a slight diminution in the acid phosphate of sodium in the urine causes a precipitate of oxalate of lime crystals their presence can be of little diagnostic importance.

4. *Indican.*

A positive or negative result in testing for this substance is of equal value in a urinary examination. It was found that a certain substance indol was absorbed during digestion and converted in the blood into indican, but during normal intestinal digestion very little indol was produced while in faulty digestion and allied troubles more was produced and appeared in the urine. Thus indican is *increased.*

a. In all obstructive diseases of the bowel.

b. In pyelitis.

c. In diseases of the spinal cord and nervous system.

d. In urina spastica.

e. After eating.

f. After cholera.

g. In cancer of the liver.

h. In malignant tumors.

i. In Addison's disease.

j. In cancer of the stomach.

k. In acute peritonitis.

The most convenient test is by Jaffé. Equal quantities of clear urine and concentrated pure hydrochloric acid are mixed in a test tube and then a concentrated solution of the chloride of lime is added drop by drop until a blue color is observed. If desired afterward about a drachm of chloroform may be added and the whole shaken by which the chloroform takes up the color and shows its intensity.

B. INORGANIC CONSTITUENTS OF THE URINE.—1. *Chlorides.*

The chlorides are present in the healthy urine principally as the chloride of sodium with traces of the chlorides of potassium, ammonia and calcium. The amount varies normally according to the amount of common salt taken with the food. The most convenient test for detecting the presence of the chlorides, is the chemical test with the nitrate of silver. If to a given specimen of urine a few drops of nitric acid are first added to keep the phosphates in solution and then a solution of the nitrate of silver be added a white, and in healthy urine, thick flocculent cloud of the insoluble chloride of silver will be precipitated thus proving the presence of the chloride of sodium in the urine thus: $N_a[Cl+Ag]NO_3 = N_a NO_3 + Ag\,Cl$.

The absence of the chlorides in urine is regarded as a very grave symptom and in watching a case of the acute febrile diseases, particularly of pneumonia it is important to test the urine daily or more often with a nitrate of silver solution, and as the crisis approaches the chlorides will be seen to diminish and may even disappear for a few hours; and after the crisis they begin to reappear. By taking the same amount of urine daily and a silver nitrate solution of known strength the disease can be watched carefully from day to day.

The chlorides are *increased*,

a. When much salt is ingested.

b. After active bodily or mental exercise.

c. During a malarial chill.

d. In diabetes insipidus.

e. When dropsies are removed by diuresis.

The chlorides are *diminished*,

a. In rest.

b. In all acute febrile diseases (exactly the reverse of urea) e. g. in pneumonia when they may be entirely absent at the crisis, a grave omen.

c. In some chronic diseases.

d. In renal diseases with albuminuria and anasarca.

2. *Phosphates.*

The phosphates consist of the alkaline and the earthy phosphates. The former consist of combinations of phosphoric acid with the bases sodium, potassium, etc., are insoluble in water and are not precipitated by alkalies, and need not be further considered. The latter earthy phosphates consist of combinations of phosphoric acid with calcium magnesium, etc., and are shown to be present in urine by adding any alkali which causes a white precipitate, which precipitate, however, is colored by blood, bile, vegetable coloring matter or any other such pathological constituent of the urine. The phosphates are increased in the urine in all diseases of the bones such as rachitis, osteo-malacia. There is, however, not necessarily an excess of phosphates in the urine simply because they are precipitated as the alkalinity of the urine or an application of heat, as in testing for albumen, may cause them to appear.

III. Abnormal Constituents of the Urine.—1. *Albumen.*

Albumen is the most important abnormal constituent of the urine. Without going into the theory of urinary secretion and excretion it may be sufficient to state that the most generally accepted view of albuminuria is that of Heidenhain which is founded upon the supposition that whenever the continuous epithelial layer on the outside of the convoluted vessels in the glomeruli is in a pathological condition the albumen escapes in the urine. In general, albumen is present in form of serum-albumen, but practically it makes no difference in what form it appears.

Physiologically albumen may be found in the urine of,

a. Infants before the urinary secretion has fairly begun.

b. Weak and delicate children at the age of puberty.

c. Adults after excretion, etc.*

Pathologically it may occur from numberless causes, but its presence is always to be considered as of grave importance. Aside from the so-called accidental albuminuria, in which the albumen does not come from the kidneys, but from the ureters, bladder or urethra we have renal or true albuminuria,

a. In the febrile and infectious diseases.

b. In diseases of the heart and lungs.

c. In actual disease of the kidney.

The tests for the detection of albumen in the urine are various and often complicated. The following are the simplest and most easy of excution and reliable. In all tests the urine should be clear and if not clear filtered.

Heat and Nitric Acid Test.

A test tube is filled two-thirds full with the urine and then a few drops of diluted acetic acid added to hold the phosphates in solution. The tube should be held obliquely over the flame and the upper layer heated to the boiling point. If a cloudiness appear which ten to twenty drops of strong nitric acid do not dissolve but increase, then albumen is present. In case a slight amount of albumen only be present the precipitate does not appear for a few minutes. This test may be carried out by first heating the urine and it the precipitate which occurs be redissolved by strong nitric acid no albumen is present, but if the urine remains cloudy after the addition of the acid then albumen is present. As an excess of strong nitric acid redissolves a small amount of albumen the

*See author's article on "Cyclic Albuminuria" in the *Philadelphia Med. News*, July 30, 1887.

acid should be added drop by drop and not more than twenty drops to the amount of urine stated. The test tube should be held against the coat sleeve or a dark back ground and allowed to stand for five minute before a decision is made.

Heller's Test.

This is by far the most reliable and convenient test offered. About two inches of clear urine are poured into a test tube, which is held obliquely while strong nitric acid is poured down the side of the glass and allowed to flow below the urine without being mixed with it. At the junction of the two fluids the slightest trace of albumen will cause a cloudy ring of albumen. Instead of a test tube a conical glass may be used. Of course the result will be the same if the urine be carefully poured upon the acid, or if the latter be passed under the urine by means of a pipette. A well defined ring-shaped cloudiness may also be caused by urea and uric acid (in which case it is higher up) or by certain resinous substances as in cubebs, copaiba, turpentine, etc., (in which case the cloudiness is at once redissolved by alcohol.)

Picric Acid Test

A few drops of a saturated watery solution of picric acid are added to clear urine and if albumen be present a slight cloudiness will show itself at once. Any cloudiness which may appear later need not necessarily be due to albumen.

Great care is necessary in carrying out all these tests and in many cases it is only after testing urine from a patient at several different times that a decision can be reached. In carrying out the first test the phosphates should not be taken for albumen merely because they are precipitated by heat. Again the presence of a small amount of albumen may be redissolved if too much nitric acid be added. In using the heat test on albuminous urine which contains a cloudy precipitate of the acid urates a very striking contrast may be observed by slightly warming the middle part of the urine until the urates here are redissolved and heating the upper layer to a boiling point until not only the urates have been redissolved, but the albumen has been precipitated and then the urine in the test tube will be clear in the middle while the lower layer will contain a precipitate of the acid urates and the upper part a precipitate of albumen. It is advisable to test urine as soon as possible after the specimen has been passed, for at all seasons, but especially in warm weather, the urine becomes decomposed and alkaline and large amounts of the carbonates (of ammonia) and uncombined carbonic acid gas are present. This also the case when the patient has been drinking certain alkaline mineral waters. When such urine is examined for albumen and nitric acid is added a lively effervescence takes place and carbonic acid gas is set free. It is often difficult to decide whether such urine contains albumen or not, for if the albumen be present in a small quantity it is liable to be redissolved by the large amount of acid necessarily added until all effervescence ceases. It is sometimes desirable to compare the amount of albumen in the urine of the same patient from day to day. The process of precipitating the albumen filtering and weighing the filtrate (the weight of the filter paper being known) is too time-wasting for a busy man. Approximately the amount per cent. may be estimated by taking test tubes of equal size, filling them daily to the same point (two-thirds full) and adding the same amount of nitric acid (about twenty drops) and letting the tube stand a few minutes. In general we may say that when the amount of albumen is 2 per cent. to 3 per cent., the whole fluid is completely coagulated. When there is 1 per cent. of albumen present, the coagulum in the test tube reaches halfway up to the level of the urine.

When 0.5 per cent. $\frac{1}{3}$ the way up.
" 0.25 " $\frac{1}{4}$ " "
" 0.1 " $\frac{1}{10}$ " "
" 0.05 " the curved part of the tube is barely filled with albumen, and whe n there is less than 0.01 per cent. present, there is a slight cloudiness, but no precipitate.

(*To be continued.*)

Society Reports.

PHILADELPHIA COUNTY MEDICAL SOCIETY.

SPECIAL MEETING, SEPTEMBER 28, 1887.

The PRESIDENT, J. SOLIS-COHEN, M.D., in the chair.

Dr. J. H. Musser reported some

CASES OF PURPURA HEMORRHAGICA AND AND LEUCOCYTHEMIA FROM PRIVATE PRACTICE.

The following cases are presented for your consideration, not on account of their strict scientific value, but because of the many practical clinical lessons one can deduce from them. They are detailed not without many regrets for their incomplete nature. Their occurrence in private practice, however, militated much against their perfection. The clinical aspects of the cases will be dwelt upon only.

CASE I.—Purpura hemorrhagica. The patient, a married woman, without children, aged forty-two years, resided in Delaware County, and was under the professional care of Dr. Bartleson, of Clifton, to whom we are indebted for the opportunity of observing the case. She had been a dyspeptic all her life, and for fifteen years was subject to hemorrhage from the uterus, due to fibroid tumors of that organ. The prolonged use of ergot checked the hemorrhages, reduced the size of the tumor, and rendered menstruation regular. Apart from these ailments, she had always been healthy, was surrounded by the best hygienic circumstances, and was of temperate habits. She was the only one of eight children who reached adult life. Six brothers and sisters died in early childhood, of causes unknown; one brother died in youth, of rheumatism; parents died of acute disease.

In July, 1886, while absent from home, Mrs. A. had an attack of gastro-enteritis. The intestinal symptoms subsided, the gastric continued. Early in August, she returned home for medical advice, on account of epigastric pain and tenderness, flatulency and vomiting, which occurred chiefly after eating. The symptoms did not yield, the stomach became more irritable, and very soon blood was discharged from the mouth. Great exhaustion ensued. Nourishment had to be given by the rectum.

August 19. Visit with Dr. Bartleson. Patient in bed, quite weak; somewhat anæmic; without fever or much emaciation; mind clear; heart and lungs free from organic disease; pulse weak and rapid; abdomen distended; uterus with fibroid tumors in hypogastrium distended, tender on palpation, without tumor. Liver normal in size; spleen not enlarged. Constant pain experienced in the epigastrium, especially underneath the xiphoid cartilage, aggravated by food. Pain, lancinating in character, also present. Vomiting excited by even the blandest food, unsavory odors, or by any untoward movements; frequently without apparent cause. Nausea present almost continuously, excited by blood which was constantly welling up in the pharynx. The ejecta, when vomiting took place, were simply blood-tinged. The nares and pharynx did not reveal the source of the bleeding. There was no cough. There was no hemorrhage in other parts of the body. The urine was normal. No diagnosis was made. The source of blood was believed to be in the œsophagus.

25*th*. Patient much weaker. Nutriment per rectum only. Hemorrhage more profuse. No change in the character of the blood ejected. To aid in the diagnosis, and possibly the treatment, lavage was practised. With the first washing blood was not observed by the naked eye, but flakes of mucus floated in the clear fluid. Suspicion of hemorrhage from the œsophagus was thus confirmed. The fluid did not contain hydrochloric acid. Blood corpuscles were seen with the microscope. The presence of latent cirrhosis of the liver with varicosity of the lower œsophageal veins, was considered. The occurrence of thrombosis of some of the veins in the portal area, secondary to

some process in the uterine fibroids, with engorgement of the veins of the œsophagus, was also weighed. No difinite conclusion arrived at.

27*th.* General condition more aggravated; no new source of hemorrhage. Visits ceased by the consultant.

September 10. Note by Dr. Bartleson. Purpura on trunk the past few days. Bleeding from mucous membrane of mouth. Extreme exhaustion.

20*th.* Death from exhaustion, preceded for several days by hemorrhage from all parts of the body.

Autopsy by Dr. Musser. Fat well preserved. Marked anæmia. Clots in mouth and nares. Universal purpura. A small pine-hole opening in the lower part of the œsophagus was the source of the early bleedings. Blood in the various hollow organs and cavities. Submucous and subserous hemorrhage throughout. Extensive hemorrhage behind the peritoneum, from the diaphragm to the pelvis. Large hemorrhage in the mesentery. Viscera normal. Brain not examined.

Summary.—Middle-aged female, free from the hemorrhagic diathesis, in her usual health, after an attack of gastro-enteritis seized with persistent œsophageal hemorrhage. Diagnosis not determined. After five weeks, general purpura. Death from retroperitoneal hemorrhage.

You will observe, in the history of the case, the difficulty of making a diagnosis until the external evidences of purpura were seen. In fact, a provisional diagnosis alone could be made. By the absence of hydrochloric acid in the gastric contents, one might presume carcinoma to be present, and yet collateral evidence could not be found to confirm the suspicion.

Persistent hemorrhage, without patent anatomical cause, extending over a period of weeks, may be the forerunner of the general hemorrhage which characterizes purpura hemorrhagica. Indeed, it is possible a single leakage causing death from exhaustion, may be the only expression of this grave disease.

It is interesting to speculate on the cause of the ulceration in the œsophagus. Was it present before or subsequent to the gastro-enteritis? It doubtless was due to thrombus, which might have lodged while the vomiting was in progress.

Deaths from purpura are quite rare; with the case just detailed, the following may be of interest. The recognition of the nature of the disease was easy.

Case II.—F., male child, aged five months, fed on condensed milk. Never of robust health. Skeleton undoubtedly rickety. Family history good. Never hæmophilia. Irregular, disseminated purpuric spots, on trunk and limbs—first appearing two weeks ago. Now universal hemorrhage; considerable exhaustion. The subcutaneous hemorrhages were of two kinds—areas of irregular, tender, deep infiltrations, and round and irregular petechiæ, often with a red centre at first. In addition, capillary cutaneous oozings were observed. A small spot under the skin would break, and a blood clot form on the surface of the skin. Several of the points bled continuously, being restrained only by styptics. An autopsy could not be obtained.

It is to be regretted that in neither of the cases was an examination of the blood made for the microbes of this affection, described by Cheyne.

Case III.—Leucocythæmia. The patient was a man, aged forty-nine years, who was of good habits, and had always enjoyed good health. His family history and previous personal health record were excellent. He was engaged in an exacting business, and during the past three years had broken down several times each year. These attacks had been attributed by his former medical attendants to malaria. Travel and suspension from duty were necessary to recuperate from them. They were attended with great exhaustion, irregular fever, and marked gastro-intestinal disturbance, occurred more frequently, and were more grave. It was noticed that he was gradually becoming anæmic.

I saw him as the junior consultant, in conjunction with his attending physician, during the last two weeks of his illness. He was then extremely pale

and emaciated, but with marked dyspnœa, and a rapidly acting feeble heart were observed. Lungs and heart normal. There was irregular fever attended with sweats. Anorexia, occasional vomiting, and irregular diarrhœa was present. The mental condition was dull, and at times he was semi-conscious. Deep-seated suppuration and acute yellow atrophy of the liver were thought of as possible causes of the condition. There was slight enlargement of the spleen, but no apparent enlargement of the liver. An aspirating needle was introduced into the liver with negative results. There was no disease of the kidneys, and examination of the urine excluded acute yellow atrophy of the liver, or diabetes. The patient continued to sink, and finally died in coma. Shortly before death enlargement of the lymphatic glands in the left axilla and in the right groin was observed. At the post-mortem examination we found the lesions characteristic of leucocythæmia. The examination of the blood after death also showed the presence of an increased number of leucocytes.

Summary.—General failure of health, marked by a series of severe attacks of illness. Final illness characterized by stupor and coma, low delirium, incontinence of urine and feces; by dyspnœa and cardiac asthenia; by gastro-intestinal disturbance; by fever and sweats.

The case was of extreme interest. All the organs of the body appeared to be normal. Septicæmia from pus in some part of the body could not be determined, because the purulent foci could not be found. That the cerebral disturbances were not due to renal or hepatic disease was evident. Organic brain disease could certainly not have been coincident, on account of the absence of symptoms indicative of such disorders. Malarial and lead toxæmia were excluded for want of evidence. Unfortunately the ophthalmoscope was not used. Only very late in the illness was the enlargement of the glands in the axilla observed. It was then learned that with each period of poor health these glands would enlarge and grow tender. The enlargement was not great, however, and could readily have been overlooked. The patient was so ill, when the hypertrophy was discovered, that, in obedience to the friends' wishes, the blood was not examined.

The diagnosis of the affection, therefore, was not made, because two most valuable instruments of precision, the ophthalmoscope and hæmocytometer, were not used.

Case IV.—Leucocythæmia. J. H., male, aged eleven years, borne in Del. Co., Penna., one of five children, all healthy; family history very good; previous health excellent; never attacked with malaria and undoubtedly not the subject of syphilis. Visited by Dr. Musser in consultation with Dr. Bartleson, April 12, 1887. During the early part of the week preceding this visit, Dr. Cartleson, who was visiting another invalid in the house, was asked to see the lad who seemed slightly indisposed. A casual examination revealed the presence of swelling in the parotid areas, which the physician attributed to mumps, as the latter was prevailing in the village at the time.

On April 9th, however, more serious attention was given the boy because he had high fever. Enlargement of the cervical, axillary, and inguinal glands was then observed, with increase of size of the liver and spleen. Apart from the fever (102°) the lad made no complaints, and there was no marked disturbance of the bodily functions.

April 12. Consultation visit at 5 P. M. Patient sitting up in bed, suffering from dyspnœa. Skin hot; face pale and a little puffy; large crop of herpetic vesicles on upper lip (present two days). Abdomen enlarged and tense, twenty-six inches in circumference at point midway between xiphoid cartilage and umbilicus. The pantaloons he wore one week previously, without discomfort, measured twenty-two inches. General pallor of anæmia spread over face, trunk, and extremities. Marked swelling of neck due to enlargement of the anterior cervical glands. They were distinct, hard, and painless, free from surface discoloration. The lymphatics over the parotid gland and below it were enlarged, but that organ

appeared to be normal in size. Two or three isolated glands in the right mammary region were enlarged, and the axillary, inguinal, and popliteal glands were hypertrophied, varying from the size of a small almond to that of a large filbert. There was no œdema of the feet.

On the nipple line the liver dulness extended from the fifth rib to a point midway between the transverse umbilical line and the iliac crest; in the axillary line from the seventh rib to within one inch of the crest, and in the median line from the xiphoid to within one-half inch of the umbilicus. The upper border of splenic dulness began at the eighth rib and its long axis extended in the normal direction to one inch above the transverse umbilical line, extending toward the right to the left nipple line, the borders of each organ could be defined on palpation—hard, rounded, smooth, and painless. The patient complained of epigastric pain and there was marked tenderness on palpation in this area. There was no ascites.

The appetite was good, the tongue coated; nausea was not observed, but fulness and flatulency was marked. The bowels were regular. The pharynx and tonsils were normal. A slight hacking cough, without expectoration, was present. High pitched breathing posterior over the right bronchus, with prolonged expiration was observed, and at the base râles of congestion were pronounced. The heart's apex was not displaced, its sounds were normal; its action quickened, impulse feeble. Pulse 120, soft and feeble. Mental faculties normal.

August 17, 6 P. M. Patient much weaker than at last visit; dyspnœa severe, air hunger. Apex beat of heart in heart in fourth interspance outside nipple line. Pulse 120. Dyspnœa attended with laryngeal cough; inspiration difficult and noisy, expiration easy.

Eyelids puffy; face swollen; very pale; unusually large crop of herpes about mouth. Head sweats. Hands and feet slightly œdematous and pale. No marked general emaciation. Cervical glands but slightly increased in size. Dyspnœa not due to their pressure. Tonsils not enlarged. No pain in larynx or pharynx on deglutition.

Mind clear; sounds in head distressing; sensitive to noise. No alteration of vision apparently. Abdomen measures twenty-seven inches. Liver and spleen readily palpate; the growth of each has extended but slightly.

Flatness on percussion in interscapular regions and dulness over the right apex behind, over which area high pitched bronchial breathing. Respiratory murmur not suppressed in any area, but replaced by bronchial breathing as indicated above. Iodine had been applied in the epigastric, umbilical, and hypochondriac regions. In these areas abundant small purpuric spots. In the groins, small papular eruptions.

Temperature observed daily. On occasion of first visit it was 102°. Since then it has been falling daily, and is now 99° in the morning and evening.

Blood. Deep plunge secured a drop, which was pale and thin. Red cells, 3,700,000. No large cells; some microcytes. Proportion of white to red, one in forty.

April 20. Progressive weakness. Dyspnœa continues. Abdomen measures twenty-eight inches. Extreme anæmia. Face puffy and pallid. Herpes increased and extreme. No appetite. No fever for the past four days. A frothy blood-tinged mucus alone is expectorated; it does not contain bacilli. Red cells, 2,100,000. White to red in proportion of one to eighteen.

Death occurred two weeks later of asthenia. No autopsy allowed.

Summary.—Rapid enlargement of the lymphatic glands, the liver, and the spleen, in a young boy. Enormous increase of white corpuscles; asthenia and anæmia; herpes and subcutaneous hemorrhages; pneumonia. Duration five weeks.

Diffused tuberculosis of the lymphatic glands and leucocythæmia, alone, were considered in the study of the case. After Fagge, we would consider the age, the absence of fever and emaciation, the enlargement of the liver, the absence of any caseating gland, the

rapid course of the disease—all against the likelihood of tuberculosis.

The microscopical examination of the sputum does not go for much, as from the nature of things the boy could not cough or expectorate freely, and hence sputum from the lungs was not obtained. The physical signs in the lungs might be due to enlarged bronchial glands, although their hypertrophy is rare in leucocythæmia. Of this, further.

The lad was so ill we could not insist, after the blood examinations, in using the ophthalmoscope. Its use would have been of great service. Nevertheless, the diagnosis of leucocythæmia we deem quite correct.

The occurrence of the unusually large crop of herpes labialis was peculiar and instructive. The physical signs in the lungs have been spoken of. The herpes, the blood-stained mucous expectoration, the fever—which subsided in due time—the extreme dyspnœa, and the occurrence of dulness and bronchial breathing, taken together, warrant fully the diagnosis of pneumonia, and, we take it, this inflammatory affection complicated the leucocythæmia.

DISCUSSION.

Dr. W. E. Robinson said: Some time ago I treated some twenty cases of phthisis by the Bergeon method. Three or four of these suffered with purpura. The purpuric spots rapidly disappeared while this treatment was continued. I then made a search for purpuric cases in the penitentiary, and found fifteen. These were placed on the use of gaseous enemata, and the spots rapidly disappeared. In three cases there was a slight return on the cessation of the treatment, but when the gas was again employed the spots entirely disappeared. During the past three months these cases have remained perfectly well.

I have also had three cases of leucocythæmia, and these have had more decided improvement under the use of gaseous enemata than with any other form of treatment.

Dr. C. D. F. Philips, of London, Eng., being invited by the President to take part in the discussion, said: The speaker has referred to leucocythæmia. I should like in this connection to say a word with reference to the action of quinia on the spleen. I have found in a large dog, that after the injection of one, two, or three doses of sulphate of quinia into the jugular vein, there is a marked contraction of the spleen, which may continue for two or three hours. The blood-pressure rises invariably during the experiment. I have also experimented upon the liver, and I think that we shall be able to prove that quinia also produces contraction of the liver.

I would make one other remark, although it has no bearing on the case reported. Caffein is useful in certain forms of congestive headache, and in order to find an explanation of its action in these cases, I removed a large portion of the cranium and dura mater of a dog, and then injected caffein. There was a visible contractraction of the vessels of the brain. In another dog, prepared in the same way, I applied a salution of the caffein directly to the brain, and the contraction of the vessels was much more distinct. I think that the beneficial effect of caffein in cases of congestive headache, is accounted for by its effect upon the vessels.

GASTRIC MOVEMENTS.—Dr. Grundzach has observed some cases of catarrh of the stomach where the glandular elements were considerably atrophied, and where the gastric juice existed only in very small quantity, and contained scarcely any hydrochloric acid. Notwithstanding this, the gastric movements were normal, so that the food did not remain longer than usual in the stomach, thus proving, according to the author's views, that the acidity of the contents of the stomach is not, as many physiologists teach, the cause of the gastric movements.—*Med. Rec.*

Dr. N. Senn says that the trouble with German teachers is that they defer till the end of the course of studies that questioning which should have been done daily.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, OCTOBER 22ND, 1887.

Editorial.

THE HYPODERMIC INJECTION OF THE SALTS OF MERCURY IN THE TREATMENT OF SYPHILIS.—The introduction of the method of employing mercury hypodermically in the treatment of syphilis dates back to a period of over twenty years ago. During that time and the present both the soluble and insoluble salts have been employed in this manner and numerous contributions have appeared giving accounts of the methods of treatment practiced by different observers and the results which followed. The subject has attracted more attention abroad, perhaps, than in this country. At any rate the hypodermic use of mercury is more largely used in practice in France and Germany, than in America. The reasons for this are not difficult to assign. The method cannot be said to be wholly agreeable to the patient and this would in a large measure account for its want of popularity in America, where the individual patient is admitted to have greater rights than the inmates of European hospitals. The results which have followed the hypodermic treatment of syphilis appear very satisfactory and the method seems to be steadily gaining ground. Many of the objectional features attending the early use of mercury in this manner have been overcome and the prejudice against it is subsiding. Smirnoff, who has had a large experience with the hypodermic use of calomel injected into the buttock in doses of ten centigrams repeated two or three times at intervals of eight to fifteen days, according to the effect upon the symptoms, asserts that "this method constitutes the most simple, convenient, exact and efficacious treatment of syphilis." He gives statistics of 113 cases of tertiary syphilis treated exclusively by calomel injections and in only sixteen were there relapses.

Pain, escars and abscesses, which were formerly very frequent, have been much diminished by improvements which have been made in the preparation of mercury used, in the technique of its application, and in the seat of the injection. Lewin claims to have made 300,000 injections with only 20 abscesses, whilst Jullien declares that he has used sublimate injections in thousands of cases without a single accident. It is quite evident from a study of statistics that it is perfectly feasible to employ a number of the salts of mercury hypodermically with only trifling pain and little or no subsequent bad results. The question now resolves itself into one of this character. Is mercury more efficacious when given by the hypodermic method than when administered by the mouth or by inunction? This question has recently been discussed in a lengthy paper read before the New York Academy of Medicine by Dr. P. A. Morrow (*Medical Record*, October 1st, 1887). After weighing the clinical testimony, balanced by his own observations and experience. Dr. Morrow arrives at the following conclusions:

"The hypodermic use of mercury, in simplicity, convenience, scientific accuracy, rapidity of action and the development of a maximum effect from a minimum quantity, constitutes a decided improvement over the ordinary modes of introducing this drug into the system.

The hypodermic method is not so liable to cause salivation, gastro-intestinal disorders and other toxic symptoms of hydrargyrism.

There is a remarkable unanimity of opinion as to its efficacy in suppressing the active manifestations of the secondary stage, and hastening their involution.

The claim that the hypodermic use of mercury increases its potentiality and widens the range of its curative action, enabling it not only to subdue refractory secondary lesions which resist ordinary treatment, but also the tertiary lesions of syphilis, may be considered as yet *sub judice.*

The claim that it endows mercury with a greater permanence of action, preventing relapses and preserving the patient from manifestation of the diathesis for a long period, is not proven.

The more pretentious claim that the hypodermic injection of twenty-five centigrammes of the bichloride, or forty centigrammes of calomel, *cures* syphilis, must be rejected as extravagant and absurd.

The irritant action of mercury introduced subcutaneously, manifest in the production of pain and local accidents, renders its general employment in the systematic treatment of syphilis impracticable.

Until these objectionable features be modified or overcome, the proper position of hypodermic medication in the therapeutics of syphilis is in the category of adjuvants.

Its employment is indicated where the necessities of the case demand a rapid and intense mercurialization. In certain emergencies, when, for example, the integrity of an important organ is threatened, its prompt and energetic action renders it superior to other modes of mercurialization.

In exceptional cases, marital syphilis, for example, where the exigencies of the situation demand secrecy in the treatment with the speediest possible suppression of the symptoms, this method is to be recommended.

In cases where gastro-intestinal irritation is so marked as to forbid the introduction of mercury to the stomach, constitutes a most efficient reserve treatment.

In tertiary syphilis, where the iodine idiosyncrasy is so marked as to preclude the use of iodide of potassium, the hypodermic use of mercury should be substituted.

My own impression is, that while the hypodermic method will never supplant the classic modes of employing mercury, yet it constitutes a decided acquisition to our therapeutical resources against syphilis, too valuable to be ignored or practically disregarded, as has been the case in this country."

Shall We Attempt to Suppress Quackery in Maryland?—During the past winter an attempt was made to revive an old law which was at one time enforced to regulate the practice of medicine in this State. It was believed by many of our most intelligent physicians that this law was not suited to the needs of the profession of the present day and in consequence of a decided opposition to its revival the attempt to do the same failed. The question comes up during the present winter, whether the profession of this State will again attempt to secure the passage of a law to suppress quackery in this State. That such legislation is needed no one can for a moment doubt. We have before us too many evidences of the urgent necessity for a law to regulate the practice of medicine in Maryland to permit this subject to remain in its present status. Something at least must be done to reform medical interests in this city, for it is here that the evil effects of quackery are most severely felt. We propose now to put the ball in motion and to direct attention to the subject with the hope that such members of the profession as have this matter most at heart will be induced to take the lead and push ahead a work of reform that is so clearly demanded.

The question of methods we do not proposed to consider at this time. It will suffice our present purpose to awaken an interest in the subject, to set forth the need of medical legislation, and to direct attention to some of the evils of our present situation. We make this statement without fear of contradiction:—There is no city of equal population in this country that is more shamefully quack-ridden than Baltimore. We have become a veritable junk-shop into which is dumped all of the old worn out and blatant quacks and imposters from

other cities, who come here and by the use of the daily press, hand bills, public lecture rooms and other similar agencies malign the profession of medicine, impose upon the credulity of the public and employ such others methods of deception and fraud as will suit their nefarious purposes. We have had before us during the past week an illustration of this class in the person of an itinerant who styles himself a Professor, hires a public hall, fills columns of the press with his bombast and pretensions and even boldly contrasts his own system with that of scientific medicine. This man's lectures are well attended by an apparently well-informed audience. We have no doubt his consultation rooms are likewise well patronized by the same class. His superior wisdom and skill, the remarkable curative properties of the remedies discovered in his laboratory and the ignorance of the medical fraternity in general concerning the diseases he so successfully treats are extolled in the daily press, which pretends to give a reported statement of this quack's lectures. This is only one of a number of such visitations the winter season brings to our city. We have no doubt before spring comes again a very hive of these montebanks will pour into our city and pass out with their pockets well-filled.

The question is again presented to the profession. Shall not an attempt be made in a legal way to suppress quackery in this State? We earnestly hope this matter will not be permitted to slumber, but that the attempt made last winter will be revived in a more practical and judicious form and pushed through to final consummation. The Legislature meets during the present winter and whatever legislation is proposed must be carried through during the present session otherwise two more years will intervene before legal protection can be again asked.

We ask our Maryland readers to consider what has been done in Virginia, West Virginia, North Carolina, Illinois, and other States and to contrast the condition of the profession in these States with our condition Maryland. Shall nothing be done to reform the status of the profession in the State? Shall we continue to remain a tramping ground for all kinds of pretenders and ignoramuses who call themselves doctors or professors and impose upon the public pretentious claims to knowledge and skill? These are practical questions. They must be answered either in the affirmative or negative. We must as a profession do something to correct these evils or else admit that these montebanks have equal rights with ourselves to public confidence and support. The people will not move in this matter. It must be the work of the profession to whom the people should look for a remedy for the evil.

Miscellany.

Chemical Tests for Bacilli.—The diagnostic value of Koch's cholera bacillus having been considerably impaired by the proved existence of other microorganisms of like morphological characters, the discovery by Pohl, Brieger, and others, of a chemical reaction alleged to be peculiar to cultures of the comma bacillus was welcomed as an additional test of importance. This reaction consists in the development of a red color (*cholera-roth*) on the addition of hydrochloric acid to the cultures, and, as Brieger has shown, the color depends upon the presence of a ptomaine containing derivatives of indol. We now learn from the experiments of Ali-Cohen, of the Hygienic Institute of Groningen (*Fortschritte der Medicin*, No. 17), that the reaction is not peculiar to the comma bacillus, and that it may be obtained by the use of any mineral acid that contains the impurity of nitrous acid, for the pure acids do not produce it. The indol derivative is produced by Koch's bacillus somewhat more rapidly than it is by other morphologically identical forms; but then there are bacteria not morphologically allied to the comma bacillus which can produce this substance quite as readily. The discovery of the *cholera-roth* is thus shorn of its diagnostic value, and reliance must still be placed upon bacteriological methods for differentiating the cholera organism.—*Lancet*, September, 17, 1887.

The Treatment of Erysipelas Complicating Surgical Affections.—Among the numerous applications used in the local treatment of surgical erysipelas, Rothe advises an antiseptic liquid as follows:

Acid. carbolic	gr. 7½.
Alcohol (50 per cent.)	gtt. 15.
Essent. terebinth	ʒ 3¾.
Tinct. iodin	gtt. 15.
Glycerin	ʒ 3¾.

Fraipont and Van Winiwarter immerse the affected part for ten or fifteen minutes in a bath of warm bichloride of mercury solution, 1 to 2000. The part is then wrapped in iodoform gauze, and enveloped with a bandaged material moistened in Burow's fluid, which, as prepared by Billroth, is

Alum	1 part.
Plumbi acetat	5 parts.
Aquæ	100 "

An impervious protective is placed over all.

On the following morning the epidermis will be found macerated; superficial diseased tissues will come away, and the part may be cleansed with material dipped in sublimate solution 1 to 2000, and then dressed antiseptically.—*Revue Générale de Cliniqe et de Thérapeutique*, September 15, 1887.—*Medical News.*

Bacteriology in Spain.—A bacteriological laboratory has been established at Barcelona. Dr. Iaime Ferran, whose name will no doubt be remembered in connection with the so-called preventive inoculations of cholera two or three years ago, has been appointed Director of the institution, with Dr. Inocente Pauli as chief assistant. The laboratory owes its establishment in a great measure to the initiative of Don Pablo Despax, a rich merchant of Barcelona, whose first intention was to found an institute for the treatment of hydrophobia, on the model of M. Pasteur's. On the matter being brought before the municipal authorities, however, they determined to establish a fully equipped bacteriological laboratory. The buildings, which are now completed, are in the gardens of the Asilo de los Pobres; they contain rooms for microphotography, for histological and bacteriological researches, and for inoculations, together with all the necessary instruments and appliances. Other rooms are fitted up as museums, and there is also a library. Antirabic inoculations will be carried out by Dr. Ferran and a staff of assistants, in strict conformity with M. Pasteur's methods.—*British Medical Journal*, October 1, 1887.

Retro-Rectal Dermoid Cyst.—Dr. Von Biernacki describes in a thesis quoted in the *Centralblat für Gynäkologie*, No. 39, 1887, a remarkable case which occurred in professor Gusserow's wards. A retro-rectal tumor was diagnosed, and during labor its nature was made evident by tapping, whereby nearly a pint and a half of hair and greasy material escaped. Notwithstanding the consequent diminution in bulk of the growth, it still remained such an impediment to labor that perforation was necessary. Convalescence was retarded by suppuration of the cavity of the cyst. Notwithstanding free incisions, pus with a fæcal odor burrowed beyond the limits of the growth, under the right labium majus, the nates, and vagina. After two months, the patient was discharged cured. Dr. von Biernacki has found records of four other cases of retro-rectal dermoid cyst. —*Brit. Med. Jour.*

Home-Made Ice.—Take a cylindrical earthen vessel and pour 3⅓ ounces of commercial sulphuric acid and 1¾ ounces of water into it and then add 1 ounce of powdered sulphate of soda. In the centre of this mixture place a smaller vessel containing the water to be frozen; then cover the vessel, and, if possible, revolve the whole with a gentle motion. In a few minutes the water in the small vessel will be converted into ice. The same mixture can be used a second or third time for making a block of ice. The operation should, if possible, be performed in a cool place—in a cellar, for example.—*Col. and Clin. Rec.*

Circular Suture of the Intestine.—Dr. William S. Halsted, of New York, contributes to the October number of *The American Journal of the Medical Seiences*, an elaborate experimental study of this subject, which may be summarized as follows:

It is impossible to suture the serosa alone, as advised by authors.

It is impossible to suture unfailingly the serosa and muscularis alone, unless one is familiar with the resistance offered to the point of the needle by the coats of the intestine. Furthermore stitches which include nothing but these two coats tear out easily, and are, therefore, not to be trusted.

Each stitch should include a bit of the submucosa. A thread of this coat is much stronger than a shred of the entire thickness of the serosa and muscularis. It is not difficult to familiarize one's self with the resistance furnished by submucosa, and it is quite easy to include a bit of this coat in each stitch as to suture the serosa and muscularis alone.

It is unnecessary in performing circular suture of the intestine to make more than one complete row of stitches if they be of the plain-quilt variety. Unless all of the stitches of the row are applied before a single one is tied, it is impossible to preserve a straight line in the application of them.

It facilitates the operation very much to make five or six presection sutures; the eversion of the mucous membrane, which otherwise takes place and makes the application of first-row, postsection stitches should be introduced at the mesenteric border of the intestine, and at a place as free from fat as possible.

The plain-quilt stitches are to be preferred to the ordinary Lembert's stitches, because, 1, one row of them (the former) is sufficient for the circular suture; 2, the knots of the first row of Lembert's stitches prevent the most accurate apposition of the opposed perintoneal surfaces; 3, the plain-quilt stitches constrict the tissues less than the Lembert's; and, 4, the former tear out less easily than the latter. Madelung's cartilage-plates, which he employs partly to prevent the tearing out of the stitches, are unnecessary when a bit of the submucosa is taken up with each stitch.

The vessels of the excised intestine should be ligated by circumvection. It is not necessary to exsect a triangular piece of mesentery, and it is unadvisable to sew together the edges of the rent in the mesentery, for, in so doing, one might include small vessels which contribute to the blood-supply of the sutured parts.

Solutions of corrosive sublimate stronger than 1: 20,000 should not be used for irrigation. It would be better, perhaps, to employ weaker solutions (1 : 30,000 or 1 : 40,000). The irrigation should be attended to most diligently when the stitches are being tied.

Amyl Hydrate.—We have already called attention to the use of this comparatively new drug for the production of sleep and to quiet nervousness; the first reference made to it in these columns being taken from the *Therapeutische Monatshefte* for July, 1887. In the same journal for September, 1887, is a second paper by Dr. Scharschmidt, even more full in its accounts than the first, which records experiments not only as to its hypnotic powers, but also as to the time required for its absorption, its effect on the pulse and general system. The drug can be given in the form of a clyster, or by the stomach in cognac or red wine and sugar.

The same writer also gives the result of its use in one-thousand and fifty-one cases, for the production of sleep.

In eight hundred and sixty-nine cases the results are classed as good, in one hundred and thirty-eight they were medium, and in the remainder no effect was noted. The dose given ranged from 23 grains to 75 grains, the larger proportion receiving from to 45 to 60 grains. —*Med. News.*

Medical Teaching at Oxford.—Oxford University has recently erected and equipped buildings devoted to the study of anatomy and physiology, with histology. The future student of medicine can now ground himself thoroughly in these branches, and in chemistry, at Oxford, before entering a college of medicine.—*Med. News.*

Medical Items.

Professor Joseph Meyer, a well-known physician of Berlin, died recently at the age of 69 years.

Scarlet fever is now epidemic in London. The last reports give 1900 cases in the hospitals.

The International Congress of Hygiene, recently held in Vienna, was a great success; over 3000 members attended the Congress.

Mr. Richard Quain, the distinguished Anatomist, whose death was recently announced, left $350,000 to the University of London.

The epidemic of cholera among the passengers of the Alesia, now quarantined on Swinburne Island, N. Y., still continues. The total number of deaths now foots up 28 since the Alesia left Mediterranean ports.

The Baltimore Academy of Medicine has awarded the annual prize of $50 to Dr. A. K. Bond, of this city, for the best paper read before the Academy during the fiscal year ending Oct, 1st, 1887.

The Pharmaceutical Era, a journal published in Detroit, Mich., offers a prize of Fifty-dollars in gold for the best essay on the subject, The Mutual Relations of Physician and Pharmacist. The essay must not exceed 2,000 words in lenth and must be handed in before January 1st, 1888.

Dr. James A. Gray, the managing editor of the *Atlanta Medical and Surgical Journal*, died on September 27, at the age of 37. The Atlanta journal owes much of its success to Dr. Gray's energy, enterprise and good business management. He will be greatly missed by the profession in his State.

It has been authoritatively announced that the Johns Hopkins Hospital will be opened for the reception and treatment of patients in the fall of 1888. This institution is in no wise affected by the failure of the B. & O. R. R. to pay its semi-annual dividend as has been intimated. The funds of the hospital are not invested in B. & O. stock.

Great uneasiness is felt in Germany on account of the condition of the throat of the Crown Prince. Sir Morrell Mackenzie sends a cable message to the *Medical News* to the following effect: "The Crown Prince is free from recurrence of the laryngeal growth. A chronic inflammation remains with a disposition to subacute catarrh on slight exposure, or after much talking."

At the opening of one of our large medical colleges, on September 29th, the learned orator is reported as follows: "He devoted a good deal of time to impressing on his audience the importance of chemistry, and, in an atmosphere that was positively stifling owing to the absence of any ventilation, he paid a very glowing tribute to the laws of hygiene and the necessity of a higher appreciation of improved sanitation."—*Med. Rec.*

For *diurnal epilepsy*, Prof. Bartholow ordered:

℞.	Sodii bromid.,	℥ss
	Potass. bromid.,	℈j
	Ammon. bromid.,	gr. x
	Liq. potass. arsenit.,	gtt. ij
	Tinct. columbo,	f℥j. M.

Sig.—Ter die till fauces are insensible; then reduce dose, but keep fauces benumbed.—*Col. and Clin. Rec.*

Dr. Pedro Francisco da Costa Alvarenga, who has just died at Lisbon, a well-known physician and a great traveller, being childless, has bequeathed the whole of the great wealth which he is said to have possessed to various European scientific and humanitarian societies. The Misericordia of Lisbon has the largest share, while Belgian, French, German and other medical societies are said to have been benefited by his will. To the Medical Society of Berlin Dr. Alvarenga is reported to have bequeathed 3,489,500 milreis, or about £3,000. —*Brit. Med. Jour.*

Fatal Plumbing.—*The British Medical Journal* says: "An instance of fatal results attending defective plumbing is given in *The Times* by Mr. A. E. Donkin, of Rugby, who states that one of the boys belonging to his house, during the recent holidays, died of diphtheria, after four days' illness. It was found that under the floor of the room in which the deceased slept there was an unstopped pipe in communication with the drain. Instances of such criminal carelessness are, we may hope, becoming less frequent in proportion as the movement for the registering of plumbers extends, and the public are made to feel the great risks they run in employing unqualified workman."

A weekly newspaper published, in this city reports an operation of partial resection of the lower jaw as performed by a physician of this city. The statement is made that this is the most remarkable operation in surgery and one very rarely performed. Of course the object of such gratuitous and erroneous statements is to advertise the superior skill of the operator. Whilst the public may be entertained with such remarkable feats of surgical skill, the physician who appears as the hero of such exploits receives, we think, a doubtful benefit. We wonder why any respectable physician will allow himself to appear as the hero of such cheap notoriety. If the information was furnished by the operator to the reporter he should have had some regard for truthsake. If the reporter concocted the story he should repudiate such acts of hero-worship. Will not physicians rise superior to such clap-trap and relegate this claim to newspaper notoriety to the quacks who are compelled to employ such methods to sell their wares?

Original Articles.

PRACTICAL NOTES ON URINARY ANALYSIS.

BY WILLIAM B. CANFIELD, A.M., M.D.,

Chief of Throat and Chest Clinic and Lecturer on Normal Histology, University of Maryland.

(*Continued from last issue.*)

III. Abnormal Constituents of the Urine.

2. *Sugar.*

Although various kinds of sugars are pathologically present in the urine such as sugar of milk (lactose) in the urine of lying-in women, also occasionally inosite and levulose, still these are of minor importance and when we speak of sugar in the urine we generally refer to *glycosuria*, meaning the presence of grape sugar (glucose, dextrose) in the urine. Von Brücke and Bence Jones proved several years ago that a trace of grape sugar was present in all normal human urine, but in such small amount that it escapes the ordinary tests and hence this needs only a mention here. Just as the mistake is so often made of saying that a man with albumen in the urine has Bright's disease, so a man with sugar in the urine is often said to have diabetes mellitus and hence with the disappearance (practically speaking) of these two abnormal ingredients of the urine, hopeless cases of Bright's disease or diabetes mellitus have been said to be cured.

Pathologically sugar may appear in the urine as a (a) transitory or a (b) permanent condition.

As a transitory condition it is described as

a. Glycosuria.

As a more lasting or permanent condition when associated with other symptom it is called,

b. Diabetes mellitus.

a. Glycosuria may occur after taking certain poisons or drugs and in consequence of disturbances of the digestion or nervous system.

b. If the glycosuria continue it may bring certain other symptoms with it and then we have a *diabetes mellitus.*

The tests for detecting the presence of sugar are so numerous that is no easy matter to be master of them all. In carrying out these tests, however, it must be remembered that if albumen be present it should first be precipitated and removed by filtration before the sugar test is made.

Before testing for sugar the specific gravity of the urine should be taken. If it is 1030 the presence of sugar should be suspected, if 1035 and over, the suspicion of sugar should be very strong. Further, if the urine be very pale and and exceed 50 ounces per day, with high specific gravity sugar is almost sure to be present. It should not be forgotten, however, that many cases of glycocosuria with large quantity of urine and with low specific gravity have been reported.

Moore's or Heller's Test.

This is a favorite test in Germany. A small quantity of urine is heated with one-third its volume of a concentrated caustic potash solution in a test tube and if sugar be present the urine turns a yellow, yellow-brown or brown color according to the amount of sugar present. This test is not reliable when the sugar contained is 0.5 per cent. or less. The urine must be boiled for several minutes. The presence of rhubarb or senna in the urine may cause a similar reaction. Although not a delicate test, still it is a reliable one if it yield a negative result, and hence it is good as a preliminary test.

Copper Tests.

These all depend upon the power which grape sugar possesses of reducing the oxide of copper and are therefore called reduction tests.

Trommer's Test.

As in the first test, to a quantity of urine one-third its volume of a caustic

potash or soda solution is added, then a sulphate of copper solution (1:10) is added drop by drop until there is only a small part left undissolved on shaking the tube. If this mixture be then heated, the presence of sugar will cause, before the boiling point is reached a yellow-red precipitate of cuprous oxide (Cu_2O). If no sugar be present the fluid will show a greenish hue. If a precipitate does not form at once on heating the tube, the test has no value. Occasionally certain drugs in the urine are capable of reducing the copper, and it is possible that these are in the urine. Many reducing agents which the chemists do not yet understand make this test of doubtful value. If the sulphate of copper solution be boiled first and then added the test is strengthened, or if the sulphate of copper solution be added in the cold, and the test-tube be set aside for twenty-four hours the test is more reliable, since sugar is probably the only substance which reduces copper in the cold.

The other copper tests of Fehling and Pavy are both reduction tests and not as convenient as the last. Pavy's pellets are also convenient for bedside tests but they are apt to change and become unreliable.

Böttger's Bismuth Test.

This is a simple and reliable, but not delicate test. The urine is made alkaline by adding equal parts of liq. potassæ or sodæ and then a pinch of subnitrate of bismuth, and boiling for a few minutes. If sugar be present it reduces the bismuth and the black metal will be deposited on the sides of the test tube.

The value of the *Picric Acid Test* is doubtful.

The *Fermentation Test* and *Polarization Test* may be omitted.

The *Phenylhydrazin Test* is the latest and probably most sensitive and reliable test for glucose. It was introduced by Emil Fischer in 1883 and since that time has been carefully studied and modified by v. Jaksch, of Vienna. Two pinches of the muriate of phenylhydrazin and four pinches of the acetate of sodium are put into a test tube with water and heated, then an equal quantity of urine is added and the whole is again heated and set aside to cool. If sugar is abundant it falls down in delicate crystals. If only a small amount is present the delicate yellow crystals of phenylglucoazone may be recognized under the microscope. This test is a very satifactory one, but takes more time in case a small amount of sugar is present.

3. *Blood.*

Blood occurs in the urine in two different forms.

a. As *Hæmaturia*, when the blood coloring matter is present in the urine in combination with blood corpuscles, and

b. As *Hæminoglobinuria*, when very few or no blood corpuscles are present and the blood is in solution in the urine.

In *Hæmaturia* the blood may come from the kidneys, pelvis of the kidney, ureters, bladder, urethra or vagina. The presence of blood may be suspected by the brownish-red color of the urine and the reddish sediment which appears on standing.

The most convenient and reliable test is to examine this sediment microscopically. It may not be out of place here to give a warning against unclean vessels and bottles in which urine is saved and brought for examination. It seems almost needless to state that cleanliness is very important in saving urine for examination. It has happened that spermatozoa have been found in female urine and vaginal epithelium in male urine. But more often from the female do we get foreign substances in the urine and therefore it is well to request women to use a Davison syringe before the water is passed or to pass the first part in one chamber and the rest in a clean chamber for examination. With a power of 300 diameters the blood corpuscles can be easily recognized either in their usual bi-concave form or, if the urine be concentrated and acid they appear with crenated edges and much shrunken.

Heller's Test.

This convenient and easy test is made by adding a caustic soda solution to some urine in a test-tube and heating. The precipitated phosphates are colored reddish-brown by the blood-coloring matter and fall in a thick cloud to the bottom of the tube. Testing for *hæmin* cystals is difficult for the inexperienced and may be omitted. If hæmorrhage occur in the urinary tubules, casts or cylinders made up of blood corpuscles are seen under the microscope.

a. Hæmoglobinuria occurs in some fevers, nervous troubles from burns and after carbolic acid poisoning. So-called paroxysmal or periodic hæmoglobinuria has been lately described as a disease due to sudden effect of cold on the skin and particularly the feet. It is often connected with syphilis. Albumen is often present from the dissolution of the blood corpuscles. If Heller's test gives a positive result and no blood corpuscles are visible under the microscope then we may conclude it is hæmoglobinuria.

4. *Pus.*

Purulent urine is cloudy, grayish-yellow with a heavy sediment which, in alkaline urine has the appearance of a tough stringy mucus like mass. Thus the chemical test for pus is to add a solution of caustic potash to the urine and observe whether the sediment takes on the above described appearance. Much more reliable is the microscopical test which shows at once the presence or absence of the pus corpuscles. On the addition of a drop of acetic acid the nuclei become distinct and the outline of the corpuscle has a glassy appearance Urine containing pus in large amount generally contains albumen. It is not easy to find the source of the pus. Pus in the urine may resemble mucus. The latter, however, forms a light flocculent cloud which remains suspended in the urine for some time. Microscopically the threads of mucus and the cells are at once recognized, but as the mucus and pus cells are microscopically identical we must also look for albumen which in pyuria is generally present and in mucinuria may be absent. Mucus is more often seen in the urine of females.

5. *Bile.*

A yellow urine which retains its foam a long time after shaking points to the presence of bile. The clothes are often stained a decided yellow by such urine.

Gmelin's Test.

A few drachms of fuming nitric acid are poured down the side of a test-tube so that it passes below the urine, just as in Heller's test for albumen. At the point of contact of the two fluids, if bile be present, a green ring is observed and below it in order a blue, violet, and finally a yellow ring. The green ring is alone decisive. The presence of albumen does not disturb the test. The same play of colors is observed by putting a drop of the suspected urine on a clean porcelain back ground and putting a few drops of fuming nitric acid by it.

(*To be continued.*)

CHRONIC RHINITIS AS AN ETIOLOGICAL FACTOR OF ACNE OF THE FACE.*

BY CARL SEILER, M.D.

For a number of years I have made the observation that acne vulgaris and acne rosacea coexisted frequently with chronic rhinitis, and particularly with the atrophic form of nasal catarrh, but it is only lately that I have come to the conclusion that this form of nasal disease is in many cases of acne the exciting cause. This conclusion may seem far-fetched and perhaps unreasonable at first glance, but I hope to be able to show that there is undoubtedly a close connection between the two affections. For this purpose I will give a short history of a few of the few cases which

*Read before the Philadelphia County Medical Society, October 12, 1887.

have come under my observation, before entering upon a theoretical discussion of the connection between chronic rhinitis and acne.

Case I.—J. H., aged thirty-eight years, a broker by profession, consulted me for chronic nasal catarrh. He stated that he had suffered from stoppage of the nose for several years, and that every morning he blew out large scabs. After this his nose felt clear but dry, and he had lost the sense of smell to a very large degree. For two or three years he had noticed a redness of the external integument of the nose, which had become gradually worse, so that at the time I saw him it had spread from the nose to the cheeks, and pimples had made their appearance. The rest of his face was free from pimples or redness. On inquiry as to his habits, he said that he had always been a total abstainer from alcohol in any form, and the redness of his nose was the more annoying to him, as it gave rise to jocose remarks on the part of his friends. His general health was good, and there were no symptoms of gastric disturbance.

On examination, I found the anterior nasal chambers filled with dry scabs of hardened mucus, and having removed them, saw that the mucous membrane below them was unusually pale, both on the septum and over the turbinated bones. The lower turbinated bone was barely projecting from the wall of the nose, and the turbinated cavernous tissue apparently absent, as no impression could be made by pressure with the probe. This condition caused the anterior chambers to be abnormally large, so that the posterior wall of the naso-pharynx could easily be illuminated and viewed through the nostrils. Irritation with the probe produced but a very slight amount of moisture to gather around the spot touched, while the whole of the mucous membrane was abnormally dry. There was no odor.

The treatment consisted in cleansing the nasal cavities morning and night with an alkaline wash, and in stimulating the mucous membrane with dilute nitrate of silver in powder, a small quantity of which was blown into the nostrils two or three times a week. In order to keep up the stimulation a tampon of cotton was introduced into the anterior nasal chambers placed against the side of the nose, in place of the atrophied inferior turbinated bone, which tampon was renewed by the patient after the cleansing morning and night. As an application to the skin I prescribed a lotion consisting of alcohol and precipitated sulphur, to be applied every night with a tuft of cotton, and to be washed off in the morning with soap and water.

Under this treatment the acne gradually diminished, and the mucous membrane of the nose became again bathed with secretion, until after a little over three months the redness had entirely disappeared, and the cotton tampon could be dispensed with, because the lower turbinated bones, or at least the cavernous tissue, began again to project into the lumen of the anterior nasal chambers. I saw the patient again three years later, unfortunately without having an opportunity of examining his nose, but he told me that there had been no return of the acne, and that his nose troubled him but little, and then only when he neglected to use the alkaline wash; the sense of smell had also returned to a large degree, but was not as acute as he might wish.

Case II.—A. L., aged twenty years, machinist from Wilmington, had had scarlet fever when ten years old, and since then had suffered from nasal catarrh. At about the age of puberty pimples began to appear on his face, which gradually became larger and more numerous, until, when I saw him, his face and even neck were covered with various sized pustules in different stages of development. In the free spaces between them comedones were numerous, and at the angles of the jaw and on the neck were large scars, forming pockets in some instances, caused by confluent acne pustules. His general health was good. On examination I found practically the same condition of things as in Case I, except that a disagreeable odor was present, and a perforation of the septum existed. This latter circum-

stance led me to inquire for syphilitic infection, but I could not elicit anything pointing to the existence of even a taint, but found that he had been in the habit of picking off the scabs of hardened mucus from the lower portion of the septum with his fingernail, and had thus gradually scratched a hole into the cartilaginous partition.

Having at that time a suspicion of the connection between atrophic rhinitis and acne, I directed, for the sake of experiment, the treatment solely to the nasal chambers, and intentionally made no applications to the acne pustules. The treatment in other respects was the same as that adopted in Case I. On account of the distance of the patient's home from the city, I saw him but seldom, and it was several months before much improvement was noticed. However, in the course of about eighteen months the acne had disappeared entirely, as had also the comedones, and the chronic rhinitis had so far yielded to the treatment that the patient considered himself cured.

Case III.—Miss E. S., aged twenty-two years, school-teacher, general health moderately good, has felt a stoppage of the right nostril for some years, while the left nasal chamber was free but very dry, so that she had to use cosmoline or cold cream every night before she felt at all comfortable. In the mornings she occasionally expelled a small scab of dried mucus of a yellowish-green color. On her face were numerous pimples and comedones, but distributed more largely on the left side. When asked, she stated that the pimples made their appearance two or three years ago; had always been more numerous on the left side of her face, and did not seem to have anything to do with her diet, as she had, at the advice of her physician, abstained from various articles of food for considerable periods of time, without apparently producing any effect upon the acne. Her monthly periods did not seem to her to produce any increase in the number of the pimples.

An examination of the nose proved this to be one of those cases which are occasionally met with, in which we find an atrophic condition on one side coexisting with a hypertrophy of the tubinated cavernous tissue on the other. The left nasal chamber being abnormally large, its mucous membrane pale and dry, and the lower turbinated bone hardly visible, presented the same characteristics as described above, and for this condition the same treatment was adopted, viz., stimulation with nitrate of silver and powder, and the cotton tampon after the dried secretion had been removed. The other nasal chamber presented the well-known features of the hypertrophic nasal catarrh, with its injected mucous membrane, from which a copious flow of secretion is poured at the slightest irritation, its projecting turbinated tissue which obstructs the lumen of the lower meatus, and its frequent projections, from the septum. Here an entirely different treatment had to be adopted, which it is needless to describe here in detail; in fact, the two sides of the nose were treated as though they were two separate and distinct cases; the one an atrophic, and the other one of hypertrophic rhinitis. The sulphur and alcoholic lotion was used in this case, as it was important to the patient to get rid of the acne as soon as possible, which happy result was accomplished in a remarkably short time, to her great delight.

The above short notes of three cases will, I think, suffice to show that there is a connection between atrophic rhinitis and acne of the face. Although a large number of such cases could be cited to demonstrate still further this point, I think it would be waste of time to do so, as they are all more or less a repetition of each other.

According to the statements of the different authors on skin diseases, acne occurs with equal frequency in both sexes, and usually makes its appearance at the time of puberty, and is frequent until the age of thirty. As predisposing causes are mentioned, gastric disturbances, either lack of or excess of sexual connection, onanism, insomnia, and intemperance, but no mention is made, in any of the works to which I have had

access, of atrophic rhinitis as a predisposing or exciting cause. That the sexual organs have a great influence upon the production of the disease cannot be doubted, for many cases are cited in which acne showed itself only during pregnancy, or at the menstrual period, in women; and it disappears with the cessation of the practice of self-abuse in boys and men; also, the fact that it is most frequent at puberty, would point in that direction. Some authors lay so much stress upon this that they direct their treatment altogether to the sexual organs, by passing a bougie into the male urethra, and prescribing vaginal douches and medication, having no faith in local applications to the skin of the face.

Speaking of the pathology of acne Veiel says: "The cause of the inflammation is the mechanical irritation by the inspissated secretion, the latter again is due to deficient glandular activity-because, owing to the defective elaboration of sebum, the secretion has time to dry in the efferent duct."

Berend explains the new formation of acne efflorescence by assuming that the swelling of the inflammatory areola around the acne pustules and nodules, occludes the efferent channels of neighboring glands. Similar views as to the pathology of the disease are expressed by others.

It would seem, therefore, that two factors must act in conjunction with each other to produce acne, the one to act as an obstruction to the efferent channel of the sebaceous glands by the introduction of dirt into it, and the drying of the secretion behind it, producing the so-called comedones, and also a diminution in the activity of the gland itself, which causes an alteration in the consistence and quantity of the secretion, which thus is not able to remove the foreign body in the mouth of the duct by pressure from behind, as undoubtedly occurs in the healthy skin. Thus the retention and accumulation of the secretion causes by pressure a localized inflammation, which is finally relieved by the formation and evacuation of pus. In acne rosacea, the rarer form of the disease, we find no formation of pustules, but simply a general more or less diffused inflammation, which is probably due also to a perverted action of the sebaceous glands, but does not lead to a retention of the secretion.

I have not been able to find an opinion expressed in any of the books as to the direct cause of the glandular irritation, whether it is altogether local, and caused by obstruction of the duct in the formation of comedones, or whether it is due to reflex nervous irritation, or finally is produced by a more or less general disturbance of the capillary circulation in the skin of the face.

The first of these propositions may be at once set down as insufficient to explain the pathological condition, for comedones are frequent in almost every face without being necessarily accompanied by acne. The other two propositions may be considered together, for we cannot have inflammation without disturbance of the circulation, and no disturbance of the circulation without nerve influence.

The above cited predisposing causes clearly indicate that an irritation of the nervous system must exist somewhere, be it in the mucous membrane of the stomach or in the sexual apparatus; which, by reflex, acts upon the easily influenced capillary circulation of the skin of the face and neck, and thus by causing a change in the capillaries around the sebaceous glands causes a perverted action of these glands if it is kept up for any length of time, or if no relief from blood-pressure is afforded. It is my belief that the cavernous tissue covering the turbinated bones provides such a relief, and that this is one of the erectile tissues of the body. This belief is strengthened by the fact that under mental excitement which causes blushing of the face, the cavernous tissue in the nose swells up, while on the contrary, any emotion which causes paling of the face, the erectile tissue of the turbinated bones becomes paler, and diminishes markedly in bulk, facts well known to every laryngologist. Let this cavernous tissue be absent, or greatly diminished, as is the case in atrophic

rhinitis, and very little or no relief is afforded for the excessive blood-pressure in the capillary circulation in the skin of the face, and the result will be acne if any of the predisposing causes be present. In the cases above cited, and in many others under my observation, the acne disappeared *pari passu* with the reformation of the cavernous tissue, and thus these would seem to be of some importance as clinical proofs of this theory.

I am fully aware that a single line of cases observed by one observer, are by no means a sufficient guarantee for the acceptance of a theory, and it will require many more cases, observed by many observers, to prove or disprove it. At the same time I cannot but think that atrophic rhinitis may be one of the etiological factors of acne.

JHAMBUL.—A CONTRIBUTION TO A STUDY OF A NEW THERAPEUTICAL AGENT—

BY W. H. MORSE, M. D., WESTFIELD, NEW JERSEY.

Synonyms:—Jhambhul, Jhambool, Jamboo, Jhambre.

Botanical Details:—Sexual system; Iconsandria Monogynia. National order; myrtacæ. Generic character; calyx, five-clept cylindrical, five petals, two to five-celled fleshy berry, brown oblong-ovate seeds. Botanical description, *Engenia*, *Jambolana*, *Syzygium*, *Jambolaunn.*

Family Relations:—E. Pimenta, E. Caryophyllata.

Descriptive Botany:—A small evergreen shrubbery tree, uniformly of pyramidal form; rarely more than ten or twelve feet in height; straight and stocky trunk, covered with a remarkably smooth, glistening, gray bark; foliage dense. The leaves differ in size, from four inches in length by two in breadth, to half that size; elliptical-ovate in shape, acuminata at either end, thickly veined, deep myrtle green in color, supported on long footstalks, and opposite. The flowers are small, roseate, but not showy, sessile, and usually terminating the branches, where they appear in succession throughout the year. The fruit is a fleshy spherical berry, having a calyx coronal, and ripening from a dark green to a dark purple color. Seeds are brown, uniform, and weigh 10 to 15 grs. each.

Habitat:—Indigenous to the perennially humid regions of India, especially to the Malayan peninsula, the Khari mountains, the Malaber coasts, and the base of the Himalaya. Best known among the hills of the Khari; where, with lakes and sloughs of soft mud at its roots, it affects a slight prominence above the dense dark brush of the jungle, and grows in clumps with the teak, the sandalwood, and wild dake, the whole frequently bound together as one tree by the climbing *Apocynaceæ.*

Medicinal Portion:—Both the bark and seeds have been used, but the peculiar virtues are more particularly resident in the seeds. The bark of the root is described as superior to that of the trunk, which latter is comparatively valueless. The unexpanded flowers are said to equal the seeds in its peculiar virtues.

Chemical Composition:—I have not as definite a report of analysis to present as a chemist wishes, but from the quantity at my hand, I am able to refer 1,000 parts of the pulverized seed to 280 of water, 45 of ash, 55 of resin, 325 of fatty matter, 170 of a tannin or tanninaceous substance, 100 (approximately) of fibre, and the remainder affording a greenish fixed oil, and sundry other principles, among which is a crystalline substance, tasteless, odorless, without reaction, and in the form of fine diverging fasciculi. This principle consists of carbon, hydrogen, and oxygen, and is soluble in alcohol and ether. It is indifferent in its effects on polarized light, as regards rotary power. It is notable and just to add that chlorophylle tints the reed to such an extent as to show marked chlorophylle-bands spectroscopically. Its loss in the ash is but a matter of course.

Preparations:—The only recognized form is the powder, the dose of which is five grains three times a day. A fluid extract of the bark has been used, but may be set down as inert.

Synergists:—All of those agents used in the treatment of diabetes.

Physiological Action:—The immediate effect is that of an excitant of the vaso-motor functions of the spinal cord, and an exaltant of the reflex functions. From the vaso-motor centres of the medulla oblongata to the subsidiary centres, the action is mediate, extending to the vaso-motor ganglia of the entire body, provoking a general rise of blood pressure owing to a tensive contraction of the arterioles. This is more especially the case with the renal and mesenteric ganglia, the tension of the arterioles supplying the glomeruli of the kidneys being such as to almost occlude them. This influence amounts to something like over-excitation, for in eight to twelve hours the capillaries again dilate, the blood-pressure however remaining below the normal even from the initial dose.

Nausea is occasionally produced, but this effect is no doubt owing to cerebral disturbance. Increase of peristalsis seems to be the action on the intestines. The stimulation of the cardiac ganglia procures an increase of the motor power of the heart. The respiratory movements are increased in number and depth. In over-doses the action is quite necessarily paralyzant to some degree.

Therapy.—It is as yet too early to enter far on the therapeutical actions of jhambul. In 1883 Dr. H. Banatvala called attention to it in the *Medical Record* as a native Indian remedy in chronic diabetes. No close attention was engaged from the profession in England to whom the notice was directed, though Lascelles-Scott presented a crude analysis, a little later. In March of this year, Dr. G. C. Kingsbury communicated his experience with it to the *Bristol Medical Journal*, and attention to its merits was re-awakened in London. Meanwhile Hazard, Hazard & Co., of New York, have prepared and introduced the powder in the form of 5-grain powders and capsules, and within a few months it has proven remarkably and uniformly successful in this country, as previously and at present is the case in India, and as promises to be the case in Great Britain.

The action is three-fold. (1.) The excretion of urine is lessened in quantity. (2.) The specific gravity is lowered at once. (3.) The formation of sugar in the urine is arrested by a prevention of the conversion of starch. Among other minor actions may be enumerated a checking and control of the bulimia and abnormal thirst, a regain of the contributions to nutrition, and a permissible removal of the restrictions of diet. During treatment the patients are excitable, but sleep well, and gain strength rapidly.

In a word, uniformly successful results are obtained speedily and without compensation. Exceptions are noted in fat subjects, and where phthisis complicates. Although these classes of cases are decidedly ameliorated, it cannot be said that any have been cured. In all other classes a cure is the rule, the arrest of the changes in the nervous system which accompany or cause the disease being an early-accomplished fact.—Health is regained even when the disease is of long duration, and when the patient is in an apparently hopeless condition.

In enteritis, acute gastritis, and peritonitis, the results attending the use of jhambul are very gratifying, and I only regret that a limited experience prohibits the giving of a line of testimony of particular interest. To increase the action of the heart the indications from the use of jhambul are promising.

Laborotory Experiments:—(1.) Rabbit. Dose, 20 grains once in three hours. Cardiac action intense and rapid; death. (2.) Puppy. Same dose for two days. Total suppression of urine, continuing forty-two hours. Loss of appetite; no thirst.

Several chemical experiments as to the amount of starch converted into sugar with and without the presence of the powder, do but corroborate those of Lascelles-Scott, and need not be given.

Caution.—Disappointment in the use of the drug will not be experienced if the American preparation above indicated is used. The English fluid extract is useless, and other powders in the market are variable in action.

Conclusion.—It seems to me that in Jhambul we have a true specific for diabetes.

PRACTICAL NOTES ON DISEASES OF THE RECTUM.

Abscesses in the Region of the Rectum.

BY S. T. EARLE, M.D.,

Professor of Rectal Surgery in Baltimore Polyclinic and Post-Graduate Medical College.

(*Continued from issue of September* 24.)

Abscessess in the region of the rectum and anus should be watched very carefully on account of the readiness with which they open into the rectum before such an accident is even suspected from external appearances. They may be divided into superficial and deep varieties. Of the first we have those that occur in the skin at the margin of the anus, which may be regarded as a simple furuncle, and arise from the same cause that produce furuncles in other portions of the body. They are so superficial as to offer no risk of rupturing into the rectum. Should be poulticed and incised when pus has been formed in them as the same condition elsewhere. Another form of superficial abscess is that which is likely to follow an acutely inflamed external hæmorrhoid, and is readily recognized by the presence and condition of the hæmorrhoid. The suffering and pain attending this form of abscess are very acute, and out of all proportion to its size. It should be incised as soon as seen, whether pus has formed or not, this being the most ready means for relieving the patient's suffering and the best treatment in any event; for if pus has not formed you have adopted the best plan to relieve an acutely inflamed external hæmorrhoid by laying it open, turning the clot out and thus preventing the abscess from forming. You may also meet with a similar form resulting from an acutely inflamed internal hæmorrhoid; here the abscess is formed nearer the mucous than the cutaneous surface, and hence, we are likely to have in these cases blind internal fistulæ resulting, if the abscess is allowed to evacuate itself spontaneously, as the opening in such a case is almost sure to be into the rectum. This form of abscess is readily diagnosed by palpation with the index finger in the rectum, and the thumb pressing on the surrounding external parts, when the induration can be readily felt, even should you not get fluctuation, which is difficult to get on account of the small size of the abscess usually. Warm and frequently applied poultices will help to soothe the pain, but an incision should be made at the earliest indication of suppuration; the incision should be made parallel to the walls of the rectum and about half an inch from the margin of the anus. There is still another variety of superficial abscess which affects the subcutaneous tissues, is diffuse and not circumscribed in character, and consequently much more serious. It is generally due to traumatism, as kicks, falls on the buttock,or long continued horse-back riding; it may also follow one of the preceding varieties, especially in cachectic and debilitated subjects, in whom it shows a decided tendency to burrow. They are attended by considerable pain, redness and induration extending for a considerable distance out on the buttock, and from these symptoms are readily recognized. As soon as fluctuation is recognized it should be freely incised at the most dependent point, and thorough drainage procured; the cavity should be thoroughly syringed out two or three times daily with a solution of hydg. bichlor. 1-2000, and the opening kept covered by several thicknesses of muslin saturated with the same solution.

Deep abscesses differ very materially from those just described in the position they occupy, the gravity of their symptoms and their consequences. To understand their location properly we must call to mind the arrangement of the levator ani muscle, which is streched across the bottom of the pelvis from side to side in the form of an inverted tent, forming the floor of the pelvis. These deep abscesses may be just below the levator ani muscle, occupying the ischiorectal fossa, which is bounded above by the levator ani muscle, below by the

subcutaneous tissue, on one side by the rectum, and the other by the lower margin of the pelvic bony rim; or they may be situated just above the levator ani muscle occupying the space bounded by the superior aponeurosis of the levator ani muscle, the peritoneum above, the rectum on one side and the walls of the pelvis on the other. It will be seen that pus if left to find its own way out, especially from the last named locality, is likely to give rise to very serious consequences, and even when below the levator ani muscle in the ischio-rectal fossa is likely to cause extensive destruction by the ease with which it can burrow in this locality, and the liability of its opening into the rectum, vagina or urethra. When above the levator ani, you run the risk of having it make its way into the rectum, vagina, bladder or peritoneal cavity, with all the attending evil consequences. If it opens into the peritoneal cavity, of course death will soon follow, if into either of the other cavities the relief is likely to be incomplete on account of the opening being generally above the level of the bottom of the abscess cavity, and we have as a rule at a later date an external opening forming also. Its most probable course when left to itself is to open externally. It should also be stated that in some cases of superior pelvi-rectal abscesses, that is, when it is above the levator ani, the suppuration may extend to the cellular tissue of the illiac fossa, in which case a large quantity of pus is likely to form and may burrow in any direction, sometimes finding its way to and opening at the groin. The causes of these deep abscesses may be traumatism the injury generally being inflicted from within, as from foreign bodies within the rectum that may puncture its walls, long continued pressure by the fœtal head during labor, and it is doubtless frequently caused by the burrowing of pus from ulcerations in the rectal walls, hence the very frequent occurrence of rectal abscesses and fistulæ in tuberculous patients in whom tuberculous ulceration of the rectal walls is so common.* The symptoms in those cases that occur in the ischio-rectal fossæ are quite well marked almost as much so as in the diffuse superficial variety; pain in the region of the rectum with induration and some redness leave little doubt as to the diagnosis; but when the seat of the abscess is above the levator ani muscle the symptoms are rather obscure, there will be pain through the pelvis and in the lumbar region, but not generally very intense, some difficulty in a defecation, with a feeling of unrelief after the act; dysuria and frequently retention of urine and some fever, but it will be almost impossible to arrive at any definite conclusion until the finger is introduced high up in the rectum, when the induration can be distinctly felt, in many instances almost obstructing its passage. As may be inferred from what has already been said with regard to the promptness needed in dealing with these cases the indication for treatment is well marked, and that is early and deep incision. Upon the occurrence of the first symptom of the formation of pus such as rigors, or a doughy feel about the induration, the knife should be inserted; before making the incision the index finger of the left hand should be inserted into the rectum and retained there as a guide during the operation; the knife should be inserted at about an inch from the anus and carried up parallel with the long axis of the rectum, taking care to keep about the same distance from the rectum as the point of exit from the anus, until the pus is reached, at least to the depth of four inches; deeper than that would risk puncturing the peritoneum. While the knife is being introduced it should be several times turned on its own axis to allow of the ready escape of pus as soon as it is reached. The incision should be very free at its point of entrance, several inches in its antero-posterior direction that the cavity may be kept empty. After the knife has been withdrawn the finger should be introduced into the abscess cavity and all septa that may be found broken down; if there has been burrowing in any direction, the incision should

*See my paper on Tuberculous Ulceration of the Rectum in the MARYLAND MEDICAL JOURNAL for Dec. 12th, 1885, where it was found 26 times in 92 cases of pulmonary tuberculosis.

be extended in that direction. The cavity should now be thoroughly syringed out with a solution of hyd. bi-chlor. 1-2000, a drainage tube inserted and the cavity lightly packed with lint saturated with the solution of hyd. bi-chlor.; this should be allowed to remain for a day, when it should be taken out, syringed with the same solution, and repacked; the same to be continued for three or four days until the cavity has filled up somewhat with granulations, when the packing may be left off, but the syringing continued until it has filled up to the surface. During the process of healing the patient should be kept in the recumbent position. The bowels had better be opened well just before, or directly after the operation, after which it would be better to confine them for three or four days, as healing advances more rapidly when they are kept quiet. Cases treated in this manner will seldom if ever result in those conditions to be described in my next paper, fistulæ.

(*To be continued.*)

Correspondence.

ANNUAL MEETING OF THE MEDICAL SOCIETY OF VIRGINIA.

RICHMOND, VA., October 19, 1887.

Editor Maryland Medical Journal,

DEAR SIR:—The eighteenth annual session of the Medical Society of Virginia opened last night with Dr. Bedford Brown, of Alexandria, President, in the chair. There were about one hundred and fifty Fellows present. The Assembly Chamber of the Capitol was placed at the disposal of the Society. The address of welcome was delivered by Dr. Thomas J. Moore of this city, and Dr. William S. Christian of Middlesex County read the annual address to the public and profession. This is a feature peculiar to this Society. The public is invited to attend the meeting and the orator has the opportunity of telling his non-professional audience some wholesome truths. This opportunity was well taken advantage of by Dr. Christian, who lectured his hearers upon the advances in medicine, the sphere and duties of the doctor, the diseases due to progress of civilization, the unhygienic habits of both sexes, the quack medicine evil, and the importance of preventive medicine. The many good hits in the address were loudly applauded.

An evidence of the flourishing character of the Society is found in the fact that sixty-three candidates were proposed for fellowship. A pleasant feature of the session was a telegram to the venerable Dr. James L. Cabell, of the University of Virginia, congratulating him upon the completion of his semi-centennial as a medical teacher.

Among the delegates and invited guests from other States are Drs. Wm. A. Hammond and Milton J. Roberts of New York, Drs. W. C. Kloman, Richard Gundry, George H. Rohé and J. S. Conrad, of Maryland, Dr. E. Carroll Morgan, of Washington, Dr. Thomas Evans, of West Virginia,and Dr. Robert Battey of Georgia.

Dr. Hunter McGuire read an excellent paper this morning upon "Anæsthesia," introductory to a general discussion of the subject. The paper gave rise to a lively discussion in which Drs. Hammond, Wellford, Chancellor, Rohé, Nash, the President, and others participated.

The State Examining Board is in session but only one candidate has presented himself for examination. Most of those who desire a certificate take the examination before the District Boards. Of thirty-six so examined during the past year two have failed.

It is intended by the Board, in conjunction with the State Society, to petition the Legislature to compel all candidates to come up before the entire Board. As at the last examination before the full Board, over one-third failed to pass, there is naturally a good deal of feeling among the friends of the unsuccessful candidates. To judge from some opinions expressed,the members of the Board are not entirely free from some of the

prejudices common to humanity. Some of the more conservative members expressed themselves as being in favor of letting well enough alone, for fear of a total abolition of the Board and repeal of the law.

The arrangement for social courtesies are worthy of the hospitable renown of the Capitol City of Virginia. To-night the Medical College of Virginia gives a theatre party to the Society followed by a reception and collation; to-morrow night Dr. Joseph A. White and wife, formerly of Baltimore, Dr. and Mrs. Hunter McGuire and Dr. and Mrs. Charles M. Shields receive the Society. On Friday night there will be a reception and banquet tendered by the profession of Richmond.

BALDY.

ANTIPYRIN IN HEMICRANIA.

WASHINGTON, D. C., October, 17, 1887.

Editor Maryland Medical Journal:

In your issue of October 15th, 1887, you publish an interesting article on "Diverse Applications of Antipyrin in Therapeutics," by Germain Sée, in the treatment of certain painful neuroses by antipyrine. You mention also, a paper by Dr. Seifert, of Würburg, on the same subject, and say, that, "In view of the results so uniformly attained by observers on the other side of the water, it is a little surprising that reports of its use by American practitioners should be so few and meagre."

Allow me to report my experience in the use of this valuable drug for a few months past in several cases of well-marked *hemicrania*, three cases in particular. Two of these were men of middle age who were great sufferers from this cause, the other was a girl of about 11 years of age, a perfect little martyr to this trouble.

To the adults I gave 15 grains each, every hour until relieved. Two or three doses proved perfectly successful. To the little girl I gave half the quantity with the same good results—perfect relief. In some cases I have used the remedy in much larger doses, and have never observed the slightest unpleasant effects. My usual prescription is,

℞.—Elixir yerba santa co. ℥iv.
Antipyrine (Nourse's) ℥ij.

M.—S. 1 tablespoonful every hour until relieved.

J. STINSON HARRISON, M.D.

GLEDITSCHINE-STENOCARPINE.

BROOKLYN, N. Y., Oct. 15th, 1887.

Editor Maryland Medical Journal:

DEAR SIR:—The fact seemingly well proven by the experience of Drs. Seward, Claiborne, Knapp, Jackson, Mitchell, and others, that the newly discovered alkaloid, Gleditschine-Stenocarpine, is largely like cocaine in its power as a local anæsthetic, has prompted me to determine whether it has a value akin to the coca alkaloid, as a stimulant, in the treatment of opium habitues, and I am now experimenting in this direction, using a two per cent. solution, exclusively by subcutaneous injection.

That cocaine, hypodermically, is a valued aid in treating the opiate neurosis, is beyond question—in my opinion—though it is not a specific, and should never be given for this purpose by the patient himself, be he physician or layman.

Should gleditschine have a similar value, it may be found free from the ensnaring danger of cocaine, though—assuming the fact of its stimulant power—this freedom from risk will not be likely, and we shall note, probably, in the not far future, baneful effects from its abuse, and gleditschine inebriety be added to the list of toxic neuroses.

It has been stated by Dr. Seward that "he has observed antidotal effects to gleditschine from morphia," and Mitchell—W. H.—asserts "it is a direct antagonist of morphine and opium, ten drops of the two per cent. solution neutralizing one grain of morphine or six of opium." Experiments on rabbits, now being made by myself, will, it is hoped, sustain the claims.

The two per cent solution can be obtained from Messrs Lehn and Fink,

New York City, at a present wholesale cost of six dollars per ounce.

I shall be pleased to receive any report of the experience which any reader of your journal may have on this subject. Yours, very cordially,

J. B. Mattison,
14 State Street.

A Meeting of the Executive Committee of the Congress of American Physicians and Surgeons, for the purpose of organization, was held on October 5th in the Hall of the College of Physicians of Philadelphia. The special societies were represented as follows:

American Surgical Association, Dr. Claudius H. Mastin, of Alabama.

American Otological Association, Dr. Cornelius R. Agnew, of New York.

American Ophthalmological Association, Dr. D. B. St. John Roosa, of New York.

American Laryngological Association, Dr. J. Solis Cohen, of Pennsylvania.

American Neurological Association, Dr. L. Carter Gray, of New York.

American Dermatological Association, Dr. I. E. Atkinson, of Maryland.

American Climatological Association, Dr. A. L. Loomis, of New York.

Association of Genito-Urinary Surgeons, Dr. John P. Bryson, of Missouri.

American Association of Physicians, Dr. William Pepper, of Pennsylvania.

The Committee was organized by the election of Dr. Pepper as Chairman, and Dr. Bryson as Secretary.

It was decided to hold the Congress of 1888 in Washington, D. C., on Tuesday, Wednesday, and Thursday, September 18th, 19th, and 20th, respectively. The sessions of the Congress will be held in the evenings, leaving the mornings and afternoons free for the sessions of the special societies participating.

The following officers of the Congress were elected:

President—John S. Billings, M.D., L.L.D., U.S.A., of Washington, D. C.

Vice-Presidents.—The Presidents elect of all the participating societies.

Treasurer.—Dr. W. H. Carmalt, of Connecticut.

The arrangement of the programme for the sessions of the Congress was referred to the President, the Secretary, and the Chairman of the Executive Committee.

Fluid Extract of Ergot for Incontinence of Urine in Children.—Dr. J. B. Johnson, (of Washington:) writes to *Medical and Surgical Reporter*, "I have been using for many years the fluid extract of ergot in the treatment of incontinence of urine in infants and children, and I almost regard it as a specific for the disease. I prefer to give it simply, and to treat separately any condition of the patients that may require therapeutical aid to correct those states of physical debility which either predispose to incontinence of urine or aggravate its presence. I give to an infant, from one to three years old, 5 to 10 drops, and to a patient from three to ten years, 10 to 20 drops every three hours. Few children object to its taste, and it should be continued uninterruptedly for two or three weeks, and resumed if the disease should return, in which case the doses ought to be gradually increased."

Immediate Relief for Lumbago.—Dr. Burggraeve recommends painting the painful parts with the following:

℞ Tr. iodinii,
Collodii,
Aq. ammoniæ, . . āā f ʒ ss.
M. *Med. and Sur. Rep.*

Injections of Quinine in Gonorrhœa.—Dr. Ledetsch states that he has been able to cure some chronic cases of gonorrhœa in a few days by using the following injection:

℞ Quin. bisulph, - - gr. xv.
Glycerini, - - - f ʒ vii.
Aquæ destil, - - - f ʒ iiss.

M.—To be used at first three times a day, then twice a day, and subsequently only once a day.

Except a slight burning, this solution has no unpleasant results.—*Prager med. Wochenschr., No.* 32, 1887.

MARYLAND MEDICAL JOURNAL

A Weekly Journal of Medicine and Surgery,

THOMAS A. ASHBY, M. D., Editor.

GEORGE J. PRESTON, M. D., Associate Editor.

Subscription $3.00 *per annum, payable in advance.*

Contributions from practitioners in good standing invited, and advertisements from reliable houses solicited.

All communications relating to the editorial department of the JOURNAL should be addressed to the editor.

Address all business communications to the

JOURNAL PUBLISHING COMPANY, PROP'S.

New No. 209 Park Avenue. BALTIMORE, MD.

☞ *Subscribers indebted to the* MARYLAND MEDICAL JOURNAL *are earnestly requested to remit to the Proprietors the amount due. Make all checks and money orders payable to the* MARYLAND MEDICAL JOURNAL.

BALTIMORE, OCTOBER 29TH, 1887.

Editorial.

ANELOZ IN THE TREATMENT OF CANCER.—Every now and then some new remedy is introduced to the profession as having special curative value in the treatment of cancer. Some of our readers will remember the "boom" in medical literature which chian turpentine created a few years ago when brought forward by Clay, of Manchester, England, as a specific in uterine cancer. It is not difficult to recall the collapse which attended the explosion of Mr. Clay's hobby. We have before us now two papers which extol two new remedies in cancerous disease. The first is entitled "Diet in Cancer," from the pen of Dr. Ephriam Cutter, of New York. In this paper Dr. Cutter undertakes to show by practical and theoretical rules and considerations that by dietetic treatment, consisting almost entirely of animal food, cancer may be cured. In support of this statement a series of cases is reported. In the second paper, Dr. J. E. Janvrin, of New York, extols the use of aveloz in the treatment of cancer. Dr. Janvrin's paper appears in the October number of the *Annals of Gynecology*. Dr. Janvrin gives the history of aveloz and then proceeds to relate a series of cases which show the effect of the drug. The preparations of aveloz which Dr. Janvrin has used are two—the "milk of aveloz concentrated," and one called "special formula," which is a preparation largely diluted with vaseline. He has found the "concentrated" the most satisfactory. Both preparations are employed locally once or twice a week. The following cases are selected to show the effect of this drug in Dr. Janvrin's hands:

"CASE No. 1.—Dec. 30, 1884.—Mrs. Le F., age 60, and the mother of several children, carcinoma of right breast; amputation had been performed some eight months previous to my seeing the case. The disease had returned promptly, and had involved the axillary glands. The few applications of the aveloz made late in the progress of the disease seemed to arrest, to a moderate degree, the rapidity of its growth, and also to overcome to a great extent the offensiveness of the discharge.

CASE No. 5.—Mr. G. F. B., age 40. Epithelioma of the right side of the nose, near the angle of the eye. December 3, 1885, made the first application and continued twice every week for five weeks. The diseased surface was one-quarter of an inch in width by one-half an inch in length. The escharotic effect of the aveloz was marked, and after the sixth or seventh application all of the diseased tissue was removed. The applications could not be made quite as thoroughly as I wished, on account of the close proximity of the eye, and for that reason a little longer treatment was required than otherwise would have been. The patient's general health had not been affected by the disease. I am confident, however, that there was no mistake in diagnosis, the patient having lost one sister from cancer of the breast, and having another at the present time suffering from far-advanced epithelioma of the cervix and uterus. He has remained in perfectly good health up to the present date.

CASE No. 6.—Mrs. F. F., German, age 70 years. Epithelioma of the right forehead. Had been a patient in the skin and cancer hospital in the autumn of 1885, and had been treated by arsenical paste, the diseased tissue having been thoroughly removed. In November, 1886, she entered the hospital again, the disease having recurred, and covering a

space some two inches in diameter. Applications of the aveloz were made twice every week, the parts having been first cleansed by the carbolic wash. After each application the surface was exposed to the air for two hours, and then covered by lint dampened with the weak carbolic solution. The burning pain was quite severe, and continued so for several hours after each application. On several occasions quite a little hæmorrhage took place as the result of the escharotic.

After a treatment of some six or seven weeks all the diseased tissue was removed; and the surface (excepting that part where the frontal bone was exposed) was in a healthy, granulating condition.

The patient's health improved constantly, and at the present date there has been no return of the disease."

As a local application, Dr. Janvrin prefers aveloz to any other eschortic in such cases of epithelioma of the cervix as are not far advanced, and in which for any reason it has been decided not to extirpate either the cervix or the entire uterus. In cases where the disease is advanced, he says the local application of the drug once or twice a week has proved very effective in diminishing pain and in increasing the quantity and offensiveness of the discharges.

Miscellany.

Potassium Permanganate as a Preventive of Diphtheria.—Johannsen ("St. Petersburger med. Woch.") argues that the secretions of the mouth and nose accumulate during the night and undergo more or less decomposition, thus favoring the action of the diphtheria germ. He therefore advises washing out the mouth and the nasal passages of children every night with a clear-red solution of potassium permanganate. He thinks his observation warrants the statement that the practice is efficient.—*N. Y. Med. Journal.*

Another Cure for Phthisis.—A month rarely passes without some new cure for consumption being offered.—Among the latest is that advocated by M. Garcin, before the Paris Academie de Medicine. His method consists in the inhalation of fluorhydric acid. The patient remains for an hour daily in a cabinet of six cubic metres capacity, the air of which is saturated with fluorhydric acid. Among 100 phthisical patients, 35 are reported cured, 41 improved, 14 stationary, 10 dead.—*Med. Record*, Oct. 22, 1887.

Parturition in Primiparæ Older than Thirty.—Eckhardt has investigated 543 cases of births in primiparæ above thirty in Schröder's clinic, and concludes that parturition at this comparatively late period of life is caused by late coitus or disease of the woman or man. The rigidity of the tissues in these patients causes prolonged labors and wounds of the genitalia. Diseases and complications of pregnancy are more frequent with these patients than with other primiparæ. Placenta prævia; prolapse of the cord; contracted pelvis; breech presentation, face presentation, and twins are more frequent than in young primiparæ. The children of such women are smaller than those of younger women. Retained placenta and uterine atony are more frequent than in others. With women between thirty and forty male children predominate over female; with women over forty female children are in excess. It is comparatively rare to find children with hard, well ossified crania among old primiparæ.

Realizing the fallacy of laying too great stress on statistics, Erkhardt forms no theories on the results of his investigations.—*Centralbatt für Gynäkologie*, October 1, 1887.—*Med. News*..

Venous Murmurs and Anæmia.—Dr. A. Weil in his work, "Auskultation der Arterien und Venen," claims that venous noises are valueless as evidences of chlorosis and anæmia. Apetz, in a recent article on a similar subject in *Virchow's Archives*, comes to nearly the same conclusion. The venous murmurs in the internal jugular veins, for example, he finds to be dependent mainly upon the youth of the patient. A venous hum in the neck of a person under twenty may be perfectly physiological.—*Medical Record*, Oct. 22, 1887.

Medical Items.

The yearly income of the *British Medical Journal* is said to be $165,000.

A Paris court has decided that a physician can not raise his fees without giving his patients notice.

Dr. Senn is of the opinion that on the Continent the best surgical work is frequently done by those outside of the University towns.

Dr. W. S. Forwood, of Darlington, Md., has been re-elected President of the Harford County Historical Society.

Dr. Macaulay writes to the *Lancet*, that he has attended a woman in her seventh confinement, since the removal of an ovarian tumor by Sir Spencer Wells, in 1875.

According to M. Vignal the mouth contains seventeen distinct species of micro-organisms. He concludes that they play an important part in the digestion of food.

Governor Beaver has appointed Dr. William H. Randle, of Jenkintown, physician at the port of Philadelphia, in place of Dr. Henry Leffman, whose commission expired October 1st.

Dr. W. T. Councilman, of the Johns Hopkins University, read a paper before the Philadelphia Pathological Society, on October 27th, on "Further Investigations on the Malarial Germ of Laveran."

Fourteen students have up to this time matriculated at the Woman's Medical College of Baltimore for the present session. As the College has a three years' graded course only three are eligible for graduation at the next commencement.

The American Public Health Association will hold its fifteenth annual meeting at Memphis, Tenn., on Tuesday, Wednesday, Thursday, Friday, November 8, 9, 10 and 11, 1887, in Young Men's Hebrew Hall, corner of Union and Second streets. Dr. G. B. Thornton, of Memphis, Tenn., is Chairman of the Local Committee of Arrangements.

It is said there once existed "The Central College of Rochester." The faculty of this remarkable institution consisted of the students—the students, of the faculty. At the close of a short and comprehensive course of study, the faculty conferred degrees upon themselves, and some are practitioners to-day.—*Weekly Med. Review.*

Dr. John G. Jay, of this city, performed the operation of Cæsarean section, Sanger modification, on October 23rd. The child was removed in an asphyxiated state and died a few minutes after its removal. The patient is alive and doing well at the date of this report, October 26th. The probabilities as to her recovery are decidedly good. This is the first Sanger Cæsarean section ever performed in this State.

James A. Stewart, of Wichita, Kan., was sentenced on Sept. 22d to seventeen years and four months imprisonment in the county jail and fined $20,800, with costs of prosecution, for the violation of the Probibition law. Stewart was a clerk in the West End drug store, and pleaded guilty to an indictment containing 2080 counts.

At a recent meeting of the council of the College of Physicians and Surgeons of Province of Quebec it was resolved to recommend the Legislature to pass a law requiring every one, no matter what his qualifications, to pass an examination before the College in all branches of medical study, before being allowed to practice. They also made large additions to the already very stringent preliminary in general education.—*Med. News.*

Muddy water is made clear in the following manner; Dip a filtering-paper in a solution of ferric chloride (43 per cent.), and another paper in a saturated solution of sodium carbonate, and dry. Place a piece of the ferric chloride paper in the muddy water, then a piece of the sodium carbonate paper; a precipitate of ferric carbonate is formed which clarifies the water. The water thus treated can be filtered through a funnel whose neck is filled with a piece of sponge. It will be as crystal, and can be used as drinking water.—*Exchange.*

In tertiary syphilis, and in scrofulous affections, iodol, in doses of from 0.40 centigramme to 2 grammes daily, are said, by Dr. Assaky, of Roumania, at the International Medical Congress meeting, to give marvelous results, producing no functional trouble, even if continued a long time. In secondary syphilis it destroys the syphilitic manifestafestations. It is indicated in all cases of specific malnutrition, aiding the general nutrition and increasing the strength and flesh.—*Col. and Clin. Rec.*

From official statistics it seems that there are 36,512 persons in France holding diplomas that permit them to exercise some branch of the healing art. Of this number, 2188 physicians, 1523 midwives, 762 druggists, and 548 herbalists belong to the department of the Seine *i. e.*, Paris and its environs. The 2000 old Paris physicians are divided into two classes, as they are throughout France—namely, those of the first class, or *docteurs en médicine*, and those of the second class, or *officiers de santé*. Both classes practice medicine, about the only difference being that the second-class physicians can not perform any important operation without the aid of a *docteur*. Their diploma only allows of practice in one department, and does not apply to all France, as that of the *docteur* does. This is the degree usually given to foreign physicians who practice in this country.—*Cor. N. Y. Med. Jour.*, Aug. 27, 1888.

Date Due

DEC 1 3 1958			